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STATE OF NEW YORK

ANNUAL REPORT

OF THE

New York (State) Dept.

Superintendent of Public Works

ON THE

CANALS OF THE STATE,

FOR THE YEAR ENDING SEPTEMBER 30, 1892,

AND ON

TRADE AND TONNAGE OF THE CANALS,

FOR THE YEAR 1892.

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TRANSMITTED TO THE LEGISLATURE JANUARY 3, 1893.

ALBANY:
JAMES B. LYON, STATE PRINTER.
1893.

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STATE OF NEW YORK.

No. 9.

IN ASSEMBLY,

JANUARY 3, 1893.

ANNUAL REPORT

OF THE

SUPERINTENDENT OF PUBLIC WORKS.

STATE OF NEW YORK:

OFFICE OF THE SUPERINTENDENT OF PUBLIC WORKS,
ALBANY, *January* 3, 1893.

To the Honorable the Speaker of the Assembly:

SIR.— As required by law I have the honor herewith to present to the Legislature the annual report of this department for the fiscal year ending September 30, 1892, and the report on the trade and tonnage of the canals of this State for the year 1892.

EDWARD HANNAN,
Superintendent of Public Works.

REPORT.

OFFICE OF THE SUPERINTENDENT OF PUBLIC WORKS,
ALBANY, N. Y., *December* 15, 1892.

To the Honorable the Legislature of the State of New York:

The Superintendent of Public Works has the honor to submit herewith, in obedience to the requirements of law, the following report for the fiscal year ending September 30, 1892.

The expenditures of the department have been as follows:

ORDINARY REPAIRS AND OPERATING EXPENSES, NEW YORK STATE CANALS, FOR THE FISCAL YEAR ENDING SEPTEMBER 30, 1892.

By Superintendent of Public Works	$3,776 46
By assistant superintendents of public works	244,392 22
By superintendents of canal repairs	405,380 49
By salaries of superintendents of canal repairs	27,712 50
By clerk hire and office expenses of Superintendent of Public Works and assistant superintendents of public works	12,895 41
By salaries and traveling expenses of Superintendent of Public Works and assistant superintendents of public works	16,065 59
Total ordinary repairs	$710,222 67
Collectors of statistics and inspectors	26,828 96
	$737,051 63

The whole appropriation made by the Legislature according to chapter 129, Laws of 1891, was $809,250, out of which the sum of $44,250 was set apart for engineers' expenses, traveling and ordinary, the sinking fund and the clerk hire of the bureau of canal affairs, which is independent of this department. Of the remaining $765,000 to be expended by the Superintendent of Public Works, there was expended the total amount of $737,051.63, leaving a balance of $27,948.37, which shows the expenses for the maintenance of the New York State canals for the closing fiscal year are the lowest annual expenses since the year 1886, and this was largely due to the fact that no breaches of canal banks occurred during the season of navigation. The detailed report of the expenditures for ordinary repairs and operating expenses will be found in subsequent pages of this report.

The Legislature of 1892, by special acts, authorized and directed that the following pieces of work should be done by the Superintendent of Public Works, in addition to the ordinary repairs, etc., necessary to maintain the canals of the State:

Reconstruction of Beaver river dam.

Construction of stone wall on west side of Black River canal, Rome, N. Y.

Removal of bars and dredging channel of Cayuga inlet.

Improvement of Champlain canal.

Removal of obstructions from the prism of the Erie canal at Buffalo, N. Y.

Deepening of Erie canal.

Removal of portion of the bank of the Erie canal at Fairport, N. Y.

Construction of an iron bridge at South Madison street, Rome, N. Y.

Improvement of old abandoned canal at Rome.

Strengthening and protecting the embankment of the Erie canal on the berme side at Schenectady.

Reconstruction and enlargement of the culvert under the Erie canal at Cooley's basin in Sweden, N. Y.

Construction of swing or hoist bridge over the Erie canal from Mulberry street to Lock street, Syracuse, N. Y.

Construction of an iron pipe culvert in Utica, N. Y.

Removal of bridge and approaches and erection of swing or lift bridge at North Salina street, Syracuse.

Completion of the Black river reservoir above Forestport pond.

Improvement of reservoirs in Madison county.

Repairing State embankment of Mad brook at Sherburne, N. Y.

Construction of a lift or hoist bridge over the Erie canal at Water street, Albany, N. Y.

Repairing State road from the east line of town of Forestport, Oneida county, to Woodhull, Herkimer county.

Improvement of channel of Shinnecock and Peconic canal.

Removal of obstructions and improvement of navigation in the Hudson river between Troy and Coxsackie.

Improvement of west channel of Hudson river at Coxsackie.

Removal of a bar and the building of a dyke adjacent to Chemung river in Corning, N. Y.

Construction of a stone dam across the Mohawk river at Little Falls, N. Y.

Repairing highway from Naumburg to Castorland bridge in town of Croghan, N. Y.

Building of embankments to protect highways from overflow caused by Northumberland dam.

STATEMENT *of proposals received and contracts awarded by the Superintendent of Public Works, during the year* 1892, *pursuant to special acts of the Legislature.*

(Chapter 199, Laws of 1892.)

For building a culvert under Erie canal at West Utica, N. Y.

John H. Nelson, Herkimer	$3,590 00
W. J. Sullivan & Co., Utica	3,718 00
F. Louis Faass & Co., Utica	3,457 00
J. W. Berry, Utica	3,927 50
Wm. Patrick, Phœnix	4,540 00

Awarded to F. Louis Faass & Co.

(Chapter 168, Laws 1890, and 382, Laws of 1892.)

For building stone box drain on the towing path side of the Champlain canal in Mechanicville, N. Y.

W. B. Neilson and others, Stillwater	$300 00

(Chapter 356, Laws of 1892.)

For building substructure of swing bridge over Shinnecock and Peconic canal and a farm road crossing over the Long Island railway.

John Cox, Brooklyn	Informal
P. J. Brummelkamp, Syracuse	$7,066 50

The above bid was rejected, but on the twelfth of July the contract was awarded to P. J. Brummelkamp for $5,544.

(Chapter 342, Laws of 1891.)

For clearing the flow ground of the reservoir on the Black river above Forestport pond.

Beckwith & Quackenbush, Herkimer	$11,000 00
F. A. Barrett & A. Mustoe, Boonville	13,750 00
James E. Flood, Sandy Hill	17,500 00

Awarded to Beckwith & Quackenbush.

(Chapter 494, Laws of 1892.)

For raising roads and bridges on Black river reservoir above Forestport pond.

F. A. Barrett & A. Mustoe, Boonville	$16,327 50
James E. Flood, Sandy Hill	16,475 00
Beckwith & Quackenbush, Herkimer	11,902 50

Awarded to Beckwith & Quackenbush.

For completion of the reservoir dam above Forestport pond.

Ira Parker & Co., Waterford	$32,700 00
James E. Flood, Sandy Hill	39,055 00
Beckwith & Quackenbush, Herkimer	30,780 00

Awarded to Beckwith & Quackenbush

(Chapter 601, Laws of 1892.)

For building iron bridge superstructure over Erie canal at Madison street, Rome, N. Y.

The Hilton Bridge Construction Co., Albany	$4,475 00
W. H. Shepard & Sons, Havana	3,800 00
Rochester Bridge and Iron Works, Rochester	4,018 00

Awarded to W. H. Shepard & Sons.

(Chapter 480, Laws of 1892.)

For building a stone dam across Mohawk river at Little Falls, N. Y.

A. Van Wagner & Co., Syracuse	$14,455 00
James E. Flood, Sandy Hill	12,157 00
Wm. L. Sherrill, Sandy Hill	10,670 00
F. Louis Faass & Co., Utica	11,998 00
A. C. Walker & Co., Amsterdam	14,356 50
Beckwith & Quackenbush, Herkimer	10,480 00
Rapp & Co., Canajoharie	9,694 00
C. D. Fenton and H. M. Boyen, Little Falls	12,909 50

Awarded to Rapp & Co.

(Chapter 469, Laws of 1892.)

For raising the dam on the Beaver river at Stillwater, N. Y.

J. T. Campbell, Lowville	$13,320 00
F. Louis Faass & Co., Utica	13,220 00

Awarded to F. Louis Faass & Co.

(Chapter 249, Laws of 1892.)

For repairing the State embankment of Mad brook at Sherburne, N. Y.

F. Louis Faass & Co., Utica	$8,090 00
Beckwith & Quackenbush, Herkimer	7,875 00
Wm. Patrick, Phœnix	7,442 00
Botsford & Shepard, Sherburne	8,150 00
John J. Hallock, Syracuse	8,265 00

Awarded to William Patrick.

(Chapter 705, Laws of 1892.)

For building a dyke adjacent to the Chemung river in Corning, N. Y.

McGreevy & Murray, Elmira	$6,725 00
John J. Hallock, Syracuse	7,225 00
Albert J. Hines, Corning	6,443 75
Thomas and John Bradley, Corning	6,547 50

Awarded to Albert J. Hines.

(Chapter 607, Laws of 1892.)

Dredging 34,500 *cubic yards of material from west channel of the Hudson river at Coxsackie.*

E. M. Payn, Albany	$0 36⅝
P. W. Myers, Albany	37½

Not awarded; prices too high.

(Chapter 607, Laws of 1892.)

Dredging 34,500 *cubic yards of material from west channel of the Hudson river at Coxsackie, N. Y.*

E. M. Payn, Albany	$0 34
P. W. Myers, Albany	37
P. J. Brummelkamp, Syracuse	42

Awarded to E. M. Payn.

(Chapter 271, Laws of 1892.)

For a retaining wall on the west side of the Black River canal in the city of Rome, N. Y.

William J. Cramond, Rome	$1,259 40

Awarded to William J. Cramond.

(Chapter 589, Laws of 1892.)

For constructing an iron pipe culvert under Erie canal at Cooley's basin, Sweden, Monroe county, N. Y.

John Calnan, Rochester	$1,742 50
Robinson & Pond, Rochester	1,290 00
Weider & Voltz, Rochester	1,428 75

Awarded to Robinson & Pond.

(Chapter 476, Laws of 1892.)

For removing obstructions from the prism of the Erie canal at Buffalo, N. Y.

Hingston & Woods, Buffalo	$19,525 00

Awarded to Hingston & Woods.

(Chapter 495, Laws of 1892.)

For strengthening and protecting the berme bank of the Erie canal near Schenectady, N. Y.

James E. Flood, Sandy Hill	$16,013 30
The Drake & Stratton Co., Sandy Hill	17,994 80
McGreevy & Murray, Elmira	16,597 35
M. G. Casey, Elmira	16,808 95
Troy Public Works Company, Troy	15,341 00
James Devine, Schenectady	16 053 21
John Twomey, Schenectady	13,723 82
Rapp & Co., Canajoharie	16,975 30

Awarded to John Twomey.

(Chapter 229, Laws of 1892.)

Iron lift bridge and substructure over Oswego canal at North Salina street, Syracuse, N. Y.

Hilton Bridge Construction Company, Albany	$8,200 00
W. H. Shepard & Sons, Havana	7,700 00
Groton Bridge and Manufacturing Co., Groton	7,539 00

Awarded to Groton Bridge and Manufacturing Company.

Substructure.

John J. Hallock, Syracuse	$2,077 50
A. Van Wagner & Co., Syracuse	2,967 30
Hughes Bros., Syracuse	2,961 60
Thomas Nesdall, Syracuse	3,378 40
F. Louis Faass & Co., Utica	5,686 00

Awarded to John J. Hallock.

(Chapter 293, Laws of 1892.)

HUDSON RIVER IMPROVEMENT.

Dredging 8,000 *cubic yards of material at Bath-on-the-Hudson, and* 4,000 *cubic yards of material from the upper entrance of Albany basin to upper railroad bridge.*

	Cents.
P. W. Myers, Albany, per cubic yard	14
Hudson River Dredging Co., Syracuse, per cubic yard, Bath	20

	Cents.
Hudson River Dredging Co., Syracuse, per cubic yard, basin	24
E. M. Payn, Albany, per cubic yard	14$\frac{8}{9}$

Awarded to P. W. Myers.

Dredging 37,000 *cubic yards of material at Stuyvesant.*

	Cents.
E. M. Payn, Albany	15$\frac{8}{9}$

Awarded to E. M. Payn.

Dredging 22,000 *cubic yards of material at Coeymans.*

	Cents.
P. J. Brummelkamp, Syracuse	21
P. W. Myers, Albany	9$\frac{3}{4}$
John P. Randerson, Albany	11$\frac{1}{2}$
E. M. Payn, Albany	10$\frac{1}{4}$

Awarded to P. W. Myers.

Dredging 10,000 *cubic yards of material below upper railroad bridge at Troy, N. Y.*

	Cents.
P. W. Myers, Albany	38$\frac{1}{2}$
E. M. Payn, Albany	39$\frac{7}{8}$

Not awarded.

Dredging 17,000 *cubic yards of material at Washington bar.*

	Cents.
P. W. Myers, Albany	38$\frac{1}{2}$
E. M. Payn, Albany	39$\frac{8}{9}$

Not awarded; prices too high.

Dredging 17,000 *cubic yards of material at Washington bar.*

	Cents.
E. M. Payn, Albany	37$\frac{8}{9}$
P. W. Myers, Albany	32
P. J. Brummelkamp, Syracuse	38

Awarded to P. W. Myers.

Dredging 10,000 *cubic yards of material below upper railroad bridge, Troy, N. Y.*

	Cents.
E. M. Payn, Albany	$37\frac{8}{9}$
P. W. Myers, Albany	32
P. J. Brummelkamp, Syracuse	39

Awarded to P. W. Myers.

Sixteen hundred lineal feet of docking on the east side of Hudson river, from a point 400 *feet north of Mull's light, to Warren's ice-house dock.*

R. Hamilton, Schodack Landing	$500 00

Awarded to R. Hamilton.

NAVIGATION.

Navigation during the past season has been exceedingly good; no detention has occurred on account of accidents by breaks, scarcity of water or other causes.

ERIE.

The middle division of the Erie canal is mostly supplied with water from storage reservoirs located north and south of the above canal. The condition of these reservoirs has often been the cause of great annoyance to this department, and great care has been required to preserve the water contained therein from being wasted, for on their supply depends the navigation of that portion of the canal, but the unusual occurrence happened this year that it required more caution to guard against more water than the anxiety for enough, as was the case last year. This is accounted for by the abundant rainfall in this locality. The report of the assistant superintendent of the middle division to this department shows that on the 1st day of October, 1892, the several reservoirs south of the Erie canal showed a reduction of sixty-seven feet and eleven inches; at the same date last year the aggregate reduction was one hundred and twenty-one feet nine inches; the reservoirs located on the north side showed about the same reduction as those situated on the south side.

The particulars relating to the navigation of the canals will be found in subsequent pages of this report.

HUDSON RIVER IMPROVEMENT.

Chapter 293 of the Laws of 1892 appropriated $35,000 for improving and deepening the channel of the Hudson river between Troy and the south line of the town of Coxsackie; included in the appropriation is the sum of $3,500 to be paid for engineering. In compliance with this law the following work was done by contract:

STATEMENT *of expenditures by Superintendent of Public Work for* 1892, *from Hudson river improvement appropriation, chapter* 293, *Laws of* 1892.

LOCATION OF WORKS.	Engineer's estimates of amounts to be dredged. Cubic yds.	Amounts dredged. Cubic yds.	Price paid per cubic yd.	Total amounts paid.
Bath shoals and upper entrance of Albany basin to upper railroad bridge	12,000	12,029	14	$1,684 06
Coeymans	22,000	26,276	09¾	2,561 91
Washington bar	17,000	15,184	32	4,858 88
Below upper railroad bridge, Troy	10,000	11,479	32	3,673 28
Stuyvesant	37,000	32,375	15 8-9	5,144 02
Total cu. yards of engineer's estimates.	98,000			
By State dredge.				
Between Troy and Albany		26,266	....	6,550 48
Taking up wrecks from channel and making dumping grounds, etc		....	....	
Total cubic yards dredged		123,609	....	
Inspectors				3,062 51
Printing				195 75
Dykes.				
Repairing 1,600 feet at Mull's dyke				*500 00
				$28,230 89

The United States government having assumed charge of the improvement of the Hudson river, the State is thereby relieved to a great extent from the liability involved in maintaining river navigation. This will obviate any conflict of authority between the federal and State governments.

I think it would be well to have a small appropriation made by the Legislature for the maintenance of such river dykes as come under the control of the State.

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* Remains unpaid.

CANAL DAMAGES.

In my report submitted to the Legislature last year, I invited attention to the large number of claims filed each year with the State Board of Claims for damages to property adjacent to the canals, caused by leakage from the different canals of the State, which necessitates large expenditures in the examination, trial and final adjustment of the claims.

The leakage which causes these damages has existed many years; in various localities leakage was created prior to the enlargement of the canals and has continued to increase and become more serious each season of navigation, on account of funds not being available to search out the source of trouble and properly provide against it. My experience while in charge of the waterways of the State causes me to feel that I can not too strongly place this matter before the Legislature, as I have observed during my tours of inspection of the canals that this trouble exists in each county through which the canals have their course. Serious damage is being done to property and numerous complaints are made to me about this trouble each year. I am unable to relieve the complainants or remedy the defect on account of funds not being available for work of this nature, and in consequence much litigation arises, causing expense and trouble to the State. The legal construction surrounding the appropriation confines the expenditures to the maintenance and operation of the canals within the blue line or canal proper, without providing for other work that may be required and can not be performed unless an appropriation for such purpose is made.

The Legislature of 1889 made an appropriation of $20,000 for the construction of ditches along the line of the canals for the purpose of stopping canal leakage. The work done under this appropriation was very beneficial in the protection of property adjoining the canals, and by the judicious expenditure of this appropriation much good has resulted to the State's interest, and a great deal of litigation has been avoided.

Therefore, I again respectfully recommend that the Legislature make an appropriation similar to that made by the Legislature of 1889 (which was $20,000), to enable me to remedy the trouble of existing canal leakage.

TONNAGE.

The whole number of tons of freight carried upon the canals of this State for the season of 1892 was 4,281,995 tons, and was composed of the following described class of articles:

	Tons.
Product of the forest	1,249,381
Agriculture	1,038,851
Manufactures	125,781
Merchandise	292,468
Other articles	1,575,514
Total	4,281,995

Which was composed of the following articles:

	Tons.
Boards and scantlings	1,046,094
Shingles	1,943
Timber	29,600
Staves	8,930
Wood	153,554
Ashes, pot and pearl	7,171
Ashes, leeched	2,089
Pork	36
Butter	8
Lard, tallow and lard oil	176
Hides	81
Flour	4,879
Wheat	620,768
Rye	4,236
Corn	150,269
Corn meal	4,104
Barley	51,596
Barley malt	13,883
Oats	72,444
Bran and ship stuffs	2,418
Peas and beans	619
Apples	3,151
Potatoes	9,632
Dried fruit	168

	Tons.
Hemp	776
Clover and grass seed	188
Flax seed	99,419
Domestic spirits	61
Oil meal and cake	1
Leather	13
Furniture	12
Bar and pig lead	67
Pig iron	27,967
Bloom and bar iron	1,914
Castings and iron ware	2,309
Domestic woolens	241
Domestic salt	89,906
Foreign salt	3,290
Sugar	2,096
Molasses	642
Coffee	200
Nails, spikes and horseshoes	935
Iron and steel	6,948
Railroad iron	524
Flint, enamel crockery and glassware	333
All other merchandise	280,790
Stone, lime and clay	556,748
Copper ore	201
Phosphate	18,948
Anthracite coal	739,916
Bituminous coal	92,481
Petroleum	9,340
Iron ore	136,612
Sundries	21,268
Total	4,281,995

Of the total tonnage moved 2,404,484 tons were through freight, and 1,877,511 tons were way freight, and 2,986,070 tons went east, 1,295,925 tons went west.

Of the total amount carried:

	Tons.
The Erie canal carried	2,978,832
The Champlain canal carried	1,021,139
The Oswego canal carried	90,886
The Cayuga and Seneca carried	75,669
The Black River carried	115,469
Total	4,281,995

Comparing the tonnage of the past season with that of 1891, there is shown to be a loss of 281,447 tons, which is attributable to the fact that the railroads have advanced their equipments to such a degree that they are able to carry freight as cheaply by rail as the same can be done by canal. This is especially so in such articles as grain, stone and clay, anthracite and bituminous coal, and iron and other ores, which, together with lumber, make up ninety per cent of the merchandise usually transported by canal.

In my annual report submitted to the Legislature in 1891 I directed attention to the improvements made by railways as compared with the improvements made to the canals of this State for the past several years. The statements made then have since been corroborated by the fact that the railroads have been able to carry freight at a rate which would have been unprofitable to the canal boatmen, and in consequence the canal did not get its share of their carrying trade.

This was the case during the early part of the season of navigation and was continued for upwards of two months. With the ripening of the crops and the consequent shipments of grain to the seaboard, prices became remunerative to the boatmen and the volume of shipments increased.

It will be noted, however, that as the railway improvements are perfected the tonnage of the competing railroads increases, while there is a decrease in canal shipments to a greater or less degree.

The following is the tonnage of the canals and the principal competing lines each year since the abolition of toll on the canal:

1883	5,664,056
1884	5,009,488
1885	4,731,784
1886	5,293,982
1887	5,553,805
1888	4,942,948
1889	5,370,369
1890	5,246,102
1891	4,563,472
1892	4,281,995

Tonnage of the New York Central railroad:

	Tons.
1883	10,892,440
1884	10,212,418
1885	10,733,499
1886	12,636,435
1887	14,531,726
1888	15,162,812
1889	15,011,541
1890	16,108,441
1891	16,621,567
1892	20,721,752

Tonnage of the Erie railway:

	Tons.
1883	13,610,623
1884	16,219,598
1885	10,253,489
1886	18,668,235
1887	13,949,260
1888	15,174,009
1889	15,084,132
1890	16,269,656
1891	17,339,140
1892	18,334,716

That the people of this State favor the improvement of the canals I entertain no doubt whatever. At the November election held in this State in 1882, an amendment to the Constitution of this State was submitted to the people for ratification. That amendment provided as follows:

Article 7, section 3.—"The first and second section of this article having been fully complied with, no tolls shall hereafter be imposed on person or property transported on the canals, but all boats navigating the canals, and the owners and masters thereof, shall be subject to such laws and regulations as have been or may hereafter be enacted concerning the navigation of the canals. The Legislature shall annually, by equitable taxes make provision for the expenses of the superintendence and repairs of the canals."

The whole number of votes cast in favor of this amendment was 495,714, and the number against it 183,212, the consequence being that the amendment was adopted and ratified by a majority of 312,502 votes. Investigating the official canvass of the vote cast discloses the fact that thirty-five counties gave a majority of 398,165 votes in favor of ratifying the amendment, while the remaining twenty-five counties gave a majority of 85,663 votes against ratifying it. These thirty-five counties which gave a majority of votes in favor of the amendment paid into the State treasury in 1891 as State tax (exclusive of school tax), the sum of $4,785,553.79 out of the total tax, which was $5,429,034.76, the twenty-five counties which voted against the amendment paying the balance, which was $643,480.97. It will be seen, therefore, that the counties giving majorities in favor of ratifying the amendment paid more than seven-eighths of this tax, while the counties which opposed it paid less than one-eighth of it.

For the same year the total amount of school tax paid into the State treasury was $3,779,393.75. Of this amount the counties which gave majorities for the amendment contributed $3,277,265.05, while the counties which gave majorities against the amendment only contributed $502,128.70, the former paying more than six-sevenths and the latter less than one-seventh of the whole amount.

While the counties giving majorities for this amendment contributed more than six-sevenths of this school tax to the State, they only expended $2,664,540.61, or seventy-one per cent of the entire amount. In other words, the counties which gave majorities for the amendment contributed for the support of the schools $612,722.44 more than they expended, while the counties that gave majorities against the amendment expended $570,679.68 more than they paid.

It is a fact that there were but four counties in this State that paid more in school tax in 1891 than the amount which was expended by them, and under the system of collecting our taxes and the disbursement of our school funds, this is the case annually. The four counties were New York, Kings, Westchester and Erie, and these are the counties which are the most directly benefited by the canal, being at the points of shipment and delivery.

But while it so happens that fifty-six counties in this State pay less for the support of their schools than the amount contributed by them for that purpose, and the balance is drawn from the school tax paid by the remaining four counties, there were twenty-one of these counties which expended more for the support of their schools than the total amount of tax paid by them for all purposes, both State and school. These counties expended $196,322.15 more than the school and State tax paid by them. Out of these twenty-one counties there were sixteen which voted against the amendment to the Constitution which made the canals free. These counties and the amounts which they expended are as follows:

Allegany	$8,672 75
Chautauqua	4,555 32
Chenango	562 58
Cortland	1,265 60
Delaware	17,746 26
Essex	15,540 05
Franklin	20,344 12
Jefferson	5,908 08
Otsego	125 20

St. Lawrence	$24,492 60
Schoharie	4,460 03
Schuyler	61 07
Steuben	12,685 69
Sullivan	13,474 81
Tioga	1,327 58
Warren	15,665 02
Total	$146,886 76

While I entertain no hostility to the public schools (on the contrary, I believe they should be maintained in all their efficiency as they now are; I appreciate their grandeur, and favor extending them to any just limit) I only desire that the people in those localities will evince the same magnanimity towards the support of the canals as the residents of the great cities show towards the support of the schools in the interior of the State. I ask that no discrimination be shown either against the State waterways or State schools, but that a feeling of justice and right shall at all times prevail in favor of both.

There is a feeling prevalent in many of the counties of this State which are remote from the canal, that the sole and only benefit derived from their operations is enjoyed by the great cities of New York, Brooklyn and Buffalo, and the county of Westchester. This feeling has been augmented by the representatives from rural districts in the Legislature, who, not having thoroughly investigated all the facts in relation to the canal, have usually voted against canal appropriations, under the false impression that they were serving their locality to the greater advantage. An intelligent examination of all the facts reveals the mistaken policy pursued in such cases.

One of the duties of my office requires that I shall communicate to the Legislature all facts that in any manner operate against the efficiency or value of the canals in the matter of transportation or otherwise, also such recommendations for improvement as may affect their service. With this object in view, I desire to call your attention to the charge made in transferring grain from lake vessels to canal boats at Buffalo. These charges in my estimation are excessive, and the work should be performed at a lower rate than is now charged by the elevator companies, for it should be taken into consideration that it takes but a small fraction of a cent in this age of strong competition to divert the traffic from one route to another. This was clearly shown by the evidence of Edward Annan, of Brooklyn, an elevator owner, who testified before a committee of the Legislature that one-eighth of a cent per bushel was a sufficient overcharge to divert the grain trade from the canal to other routes.

IMPROVEMENTS.

What improvements can be made to the canal to meet its wants and place it on a footing to compete with other carrying routes, so as to continue its use as a great freight regulator and to place it in such a condition that it will remain a benefit to the people of the State? This question has agitated the ingenious minds of a great many people. Various methods have been proposed and considered. Among them one method has been to lengthen locks so as to permit two boats to be locked at once, thereby saving expense to boatmen in transportation by enabling them to tow two boats by using a less number of horses and men, also reducing the time of transportation between Buffalo and tide water. This improvement has been tried, and while it has been of some benefit, it is still inadequate for the occasion.

There are two other propositions for improvement being offered, one to increase the speed by power other than horses, and the other to increase the carrying capacity of boats by either deepening the canal or raising its banks, thereby enabling it to get a greater depth of water.

The question of deepening the canal would require a great expenditure of money, as it would cause the rebuilding of all its structures. The proposition of raising the banks would be the most feasible of either of these suggestions, as the present structures could be utilized by increasing their height. The other proposition is to increase the motive power and thereby increase the speed of boats; this should be considered very favorably.

The power to be considered is electricity, for the great natural facilities for generating such power along the line of the canal are very favorable.

AQUEDUCTS.

In my annual report to the Legislature of 1890, and also a special report made by the State Engineer and Surveyor and the Superintendent of Public Works, dated March 4, 1891, attention was called to the dangerous condition of the upper and lower Mohawk aqueducts and the Schoharie creek aqueduct. Since that time I have made some such repairs as I could to those structures which kept them in use up to the present time. I have also had a careful and minute examination made of those structures, which showed as follows:

Schoharie creek aqueduct, which crosses Schoharie creek, is composed of fourteen bents, or arches, of thirty-nine feet three inches in width each. This aqueduct was rebuilt in the year 1873 and has not been repaired to any great extent since that time. This structure is in a dangerous condition in several places. I find that piers 7 and 8, commencing at the east end, have been gradually undermined and have sunk eight inches lower than the adjoining piers. This is the most dangerous thing that could occur to a structure of this kind, and will require a crib to be constructed around the bottom of them so as to protect them.

I also find that bents 1, 2, 3, 4 and 5, commencing from the east end, require new posts and caps on the north side.

Bents 6, 7 and 8 want new posts and caps on the north and south sides, also a new bottom; bents 9 and 10 require new posts and caps on north side; bents 11 and 12 require new posts and caps on north side, and also a new bottom; bents 13 and 14 want entirely new trunks, as the timbers are decayed and in a bad condition.

From such an estimate as I am now able to make, it will cost at least $23,000 to place this aqueduct in a safe condition.

The upper Mohawk aqueduct crosses the Mohawk river three miles east of Schenectady; it is constructed in fourteen spans, with a total length of 616 feet. The examination made of this aqueduct, which was as complete as circumstances would allow, shows the mason work to be in a fair condition, but the trunk is in a bad state of decay. I find in the different bents in this aqueduct that there is, based on measurement such as it is now possible to make, 150,000 feet of oak, 75,000 feet of pine timber, and 150,000 feet of pine plank which are in a rotten and decayed condition and will have to be renewed. To replace this timber, together with the necessary iron work, will cost at least $20,000.

The lower Mohawk aqueduct crosses the Mohawk river at Crescent, Saratoga county. It consists of twenty-six arches, or spans, of forty-four feet each in width, making the entire length of 1,144 feet. I find on examination of this structure that a great many of the timbers on the sides are in a very bad condition; some of them will have to be replaced before navigation can be resumed in the coming spring. This is especially so in arches 4, 7, 9, 17 and 25; they will require new trusses, king posts and braces. Two of these arches on the towpath side will have to be entirely new. I find in a number of cases the trusses in many of the arches are in good condition, having been renewed from time to time during the last few years. I also find the needle beams in some cases are broken, and a great many of them are rotten and decayed at their ends.

The examination also shows that the aqueduct in its entire length, in most places requires new braces and posts and also new sides; the bottom I find in a fair condition. The timbers on the upper ends of the piers, which protect the masonry from ice, are all gone and will have to be renewed.

After a careful estimate by such measurements as I may be now able to obtain, it will require the following amount of timber and iron to replace this aqueduct in a safe condition for at least ten or twelve years to come:

White oak timber, 250,000 feet; white pine timber, 15,000 feet; Norway pine plank, 70,000 feet; white oak timber for piers, 30,000 feet; wrought-iron bolts for sides and piers, 20,000 pounds, and 154 kegs of spikes. It will require at least $25,000 to place this aqueduct in a proper condition.

CHAMPLAIN CANAL.

The improvement on the Champlain canal, carried on by the State until within the past two years, should be continued. Twenty-five or twenty-six miles of its whole length — which is sixty-six miles — have been improved by straightening its course, deepening and widening its prism to a uniform width of forty-four feet at bottom, and a standard depth of six feet. Navigation has not been benefited to any great extent by the improvement that has been made, nor will it until such time as the whole length of the canal shall be improved, for the reason that a boat can not increase its load if there is not a uniform depth of water in its entire length. During last season this department was petitioned by a number of boatmen on the Champlain canal to increase the draft of water by two inches, claiming that by doing so they would be enabled to carry a larger load and by that means make their business remunerative. This clearly shows how an increased draft of water would benefit navigation.

BLACK RIVER CANAL.

If navigation is to be maintained on this canal, an appropriation will be required to keep it navigable. Most of, the locks, especially those between Rome and Boonville, are in a decayed and dangerous condition; it required the greatest care during last season to keep them in operation. And, in my judgment, unless these locks are rebuilt, navigation is liable to be suspended at any moment during the navigable season.

The whole number of locks along the Erie canal, from Albany to Buffalo, is seventy-three, which includes the two guard locks at Buffalo and Black River, and exclusive of the side-cut locks at West Troy. Of this number, thirty-eight have been lengthened; of the remainder, five or six could be lengthened without involving a great expenditure of money. In my judgment, these locks should be lengthened to complete the improvement started under the Laws of 1884. I would also recommend that an appropriation be made for bottoming out the Erie canal.

In closing this report, I desire to give my expression of thanks to the division and section superintendents and their subordinates for the zeal and faithfulness constantly exerted by them in the performance of their various duties, and I take pleasure in stating that by their systematic care and constant attention, no detention has occurred to navigation, no serious complaints have been made, and the expense of this department has been somewhat reduced.

EDWARD HANNAN,
Superintendent Public Works.

SUMMARY *of expenditures, ordinary repairs, for fiscal year ending September* 30, 1892.

CANALS.	Sections.	By Superintendent of Public Works.	By assistant superintendents of public works.	By superintendents of canal repairs.	Salaries of superintendents of canal repairs	Total each section.	Total each canal.	Totals.
Erie	1	....	$5,497 71	$5 108 05	$1,500 00	$57,105 76		
Erie	2	....	6,948 77	2. ,450 94	1,500 00	30,899 71		
Erie	3	....	14,178 84	21,468 92	1,500 00	37,147 76		
Erie	4	....	6,245 82	23,321 72	1,500 00	31,067 54		
Erie	5	....	6,766 02	13,194 79	1,500 00	21,460 81		
Erie	6	....	14,859 02	11,342 51	1,312 50	27,514 08		
Erie	7	....	4,629 91	7,978 85	1,500 00	14,108 76		
Erie	8	....	6,149 18	25,242 85	1,500 00	32,892 03		
Erie	9	....	13,004 37	24,368 80	1,500 00	38,873 17		
Erie	10	....	13,406 95	25,543 90	1,500 00	40,450 85		
Erie	11	....	21,194 48	48,910 99	1,800 00	71,905 47	$403,425 89	
Champlain	1	....	$14,607 53	$22,536 01	$1,500 00	$38,643 54		
Champlain	2	....	6,326 45	25,339 36	1,500 00	33,165 81		
Champlain	3	....	4,795 73	16,958 25	1,500 00	23,253 98	95,063 33	
Oswego	1	....	$2,576 30	$8,209 54	$1,200 00	$11,985 84		
Oswego	2	....	5,398 65	13,847 45	1,500 00	20,746 10	32,731 94	
Cayuga and Seneca	......	....	$1,501 27	$7,891 85	$1,200 00	$10,593 12	10,593 12	
Black River	1	....	$12,355 45	$25,739 57	$1,500 00	$39,595 02		
Black River	2	....	3,115 10	10,926 14	1,200 00	15,241 24	54,836 26	
Chenango	......	....	$1,129 75	....	....	$1,129 75	1,129 75	
Division expenses:								
Eastern		....	$61,198 79	....	....	$61,198 79		
Middle		....	3,959 84	....	....	3,959 84		
Western		....	14,546 29	....	....	14,546 29		
		....	$79,704 92	....	....	$79,704 92	79,704 92	

General expenses:							
Erie	$3,776 46	....	....	....	$3,776 46	3,776 46	$681,261 67
Office expenses:							
Albany	$7,862 37	....	....	....	$7,862 37		
Eastern division	....	$1,861 28	....	....	1,861 28		
Middle division	....	1,842 77	....	....	1,842 77		
Western division	....	1,328 99	....	....	1,328 99	$12,895 41	
		Salaries.	Travel.	Total.			
Edward Hannan, Superintendent of Public Works		$6,000 00	$82 49	$6,082 49	....		
George E. Simmons, assistant superintendent of public works		3,000 00	215 38	3,215 38	....		
James H. Flanagan, assistant superintendent of public works		3,000 00	381 52	3,381 52	....		
George Chambers, assistant superintendent of public works		3,000 00	386 20	3,386 20	....	16,065 59	
							28,961 00
							$710,222 67

STATEMENT *of expenditures for ordinary repairs and operating expenses on the New York State canals, by divisions, for the fiscal year ending September* 30, 1892.

CANALS.	By Superintendent of Public Works.	By assistant superintendents of public works.	By superintendents of canal repairs.	Total.
Eastern division.				
Erie	....	$32,871 14	$117,349 63	
Champlain	....	25,729 71	64,833 62	
Division expenses	....	61,198 79	....	
Office expenses	....	1,861 28	....	
Assistant superintendent's salary and expenses	....	3,215 38	....	
Salaries superintendents of canal repairs	....	....	10,500 00	
		$124,876 30	$192,683 25	
Middle division.				$317,559 55
Erie	....	$26,254 95	$32,516 15	
Oswego	....	7,974 95	22,056 99	
Cayuga and Seneca	....	1,501 27	7,891 85	
Black River	....	15,470 55	36,665 71	
Chenango	....	1,129 75	....	
Division expenses	....	3,959 84	....	
Office expenses	....	1,842 77	....	
Assistant superintendent's salary and expenses	....	3,381 52	....	
Salaries superintendents of canal repairs	....	....	10,912 50	
		$61,515 60	$110,043 20	
Western division.				171,558 80
Erie	....	$53,754 98	$124,066 54	
Division expenses	....	14,546 29	....	
Office expenses	....	1,328 99	....	
Assistant superintendent's salary and expenses	....	3,386 20	....	
Salaries superintendents of canal repairs	....	....	6,300 00	
		$73,016 46	$230,366 54	
General expenses.				203,383 00
Erie	$3,776 46	....	....	
Albany office	7,862 37	....	....	
Superintendent of Public Works, salary and expenses	6,082 49	....	....	17,721 32
Total				$710,222 67

ALBANY OFFICE.

October 1, 1891, *to October* 1, 1892.

Salaries and clerk hire	$6,564 55
Postage stamps and box rent	166 58
Telegraphing	101 70
Telephone service	73 85

Stationery	$235 79
Printing	676 40
Miscellaneous	43 50
Total	$7,862 37

ERIE CANAL — GENERAL.

Repairs to West Main street bridge, Rochester	$500 00
Labor on culvert at Holley	149 24
Labor on Schuyler street bridge, Utica	28 62
Special agents	3,098 60
Total	$3,776 46

STATEMENT *of salaries paid to superintendents of canal repairs during the fiscal year ending September* 30, 1892.

ERIE CANAL.

Sec.	1.	T. I. Hardin	$1,000 00	
	1.	James H. Boyland	500 00	
	2.	James Collins	1,500 00	
	3.	Robert F. Owens	1,500 00	
	4.	Henry M. Wood	1,500 00	
	5.	John W. Manley	1,500 00	
	6.	John F. Ryan	1,062 50	
	6.	Edwin Lodder	250 00	
	7.	Josiah H. Hamilton	1,500 00	
	8.	Charles H. Ford	1,500 00	
	9.	John S. Gunsaul	1,500 00	
	10.	Frank C. Lillis	1,500 00	
	11.	Charles McDonough	1,800 00	
				$16,612 50

CHAMPLAIN CANAL.

Sec.	1.	James Dougrey, Jr	$1,500 00	
	2.	John H. Ganley	1,500 00	
	3.	Sylvester Mahan	1,500 00	
				4,500 00

OSWEGO CANAL.

Sec.	1.	Thomas O'Brien	$1,200 00	
	2.	Anthony Salladin, Jr	1,500 00	
				2,700 00

CAYUGA AND SENECA CANAL.

	John McKeon	$720 00	
	John Van Riper	480 00	
			$1,200 00

BLACK RIVER CANAL.

Sec. 1.	G. Clinton Ward	$1,500 00	
2.	James T. Campbell	800 00	
2.	Thomas Norton	400 00	
			2,700 00
			$27,712 50

STATEMENT *of moneys paid into the State treasury by the Superintendent of Public Works for the fiscal year ending September* 30, 1892.

From Casey, Murray & Co., for materials furnished for Locks 42 and 43, Erie canal	$75 55
From John S. Gunsaul, section superintendent, from Worthington & Sill, for pumping boat	15 00
From G. E. Simmons, assistant superintendent, from boat Perry Robinson for use of steam pump at West Troy	4 00
From H. M. Wood, section superintendent, from W. B. Wemple's Sons, for labor	12 38
From J. H. Ganley, section superintendent, for rent of house at Lock 13, Champlain canal	6 00
From R. F. Ownes, section superintendent, for sale of boat George W. Miller	10 25
From T. I. Hardin, section superintendent, for fines collected	15 50
From George Chambers, assistant superintendent, from Albaugh & Brayer, for use of State dredge,	120 00
From George C. Madden, for use of State dredge	114 50
From Edward Hannan, Superintendent of Public Works, balance on Forestport dam, under chapter 274, Laws 1889	446 20

From William C. O'Neil, collector, collections at ship lock, Buffalo	$755 70
From J. H. Flanagan, assistant superintendent, for sale of ice on Middle division	75 06
From John McKeon, section superintendent, for sale of ice on Cayuga and Seneca canal	30 00
From Edward Hannan, Superintendent of Public Works, balance of sale of old pipe at Rome, under chapter 23, Laws 1892	43 24
From J. H. Hamilton, section superintendent, for fine of boat Columbia	1 00
From Geo. Chambers, assistant superintendent, for sale of ice on Western division	988 10
From sale of ice on Eastern division	661 88
From wreck of tug-boat Morris Gross	206 72
From J. H. Ganley, section superintendent, for rent of house at Lock 13, Champlain canal	5 00
From G. E. Simmons, assistant superintendent, collected from captain of boat C. E. Fence, for use of steam pump	4 00
From Geo. Chambers, assistant superintendent, for materials furnished J. & M. McMahon, contractors on Rowe street bridge, Rochester	35 05
From J. S. Gunsaul, section superintendent, for pumping boat for Smith, Davis & Co	35 70
From Geo. E. Simmons, assistant superintendent, for pumping sunken boat for N. Y. & Lake Champlain Trans. Co	9 00
From Wm. H. Daubney, collector, for fine of boats Miss Georgie and W. H. Knapp	10 00
From J. H. Ganley, section superintendent, for rent of house at Lock 13, Champlain canal	7 00
From T. I. Hardin, section superintendent, for sale of old boat	1 00
From G. E. Simmons, assistant superintendent, for materials furnished Wm. Dilmore, for use on Hudson river	15 00
Total	$3,702 83

STATEMENT *of payments and drafts made by the Superintendent of Public Works, under legislative acts, designated in the following list, for the purposes therein stated, from December* 15, 1891, *to December* 15, 1892, *New York State canals, etc.*

(Chapter 274, Laws 1890.)	
Dredging Erie basin, Buffalo	$5,717 10
(Chapter 302, Laws 1891.)	
Dredging Lower Black Rock harbor	3,090 82
(Chapter 240, Laws 1889.)	
Canal ditches	2,362 15
(Chapter 302, Laws 1891, and 356, Laws 1892.)	
Improving channel between Shinnecock and Peconic bays and constructing swing-bridge over same	19,724 67
(Chapter 69, Laws 1891.)	
Schuyler street bridge, Utica	3,823 63
(Chapter 113, Laws 1891.)	
Protecting the channel of Moyer creek	6,295 21
(Chapter 221, Laws 1891.)	
Culvert at Holley	92 53
(Chapter 82, Laws 1891.)	
Iron bridge at Tonawanda	21,621 08
(Chapter 272, Laws 1891.)	
Improving channel of Black creek, town of Clarence,	1,131 75
(Chapter 302, Laws 1891.)	
Cattaraugus Indian reservation	81 25
(Chapter 282, Laws 1891.)	
Ditching, town of Mentz	50 50
(Chapter 239, Laws 1891.)	
Lift-bridge at Nineteenth street, West Troy	12,312 86

(Chapter 342, Laws 1891.)	
Clearing flow ground of reservoir on Black river above Forestport pond	$5,224 00
(Chapter 271, Laws 1891.)	
Constructing wall at Glens Falls feeder	3,858 57
(Chapter 298, Laws 1891.)	
Sewer at Medina	4,468 00
(Chapter 226, Laws 1891.)	
Rebuilding Oswego wall	8,808 28
(Chapter 238, Laws 1891.)	
Culverts at Brockport	9,605 16
(Chapter 321, Laws 1891.)	
Culvert at Adams Basin	8,966 49
(Chapter 341, Laws 1891.)	
Bridge at Genesee street, Utica	626 39
(Chapter 300, Laws 1891.)	
Raising bank of Chemung river at Corning	6,593 85
(Chapter 241, Laws 1891.)	
Sidewalk to bridge at Depeyster street, Rome	850 00
(Chapter 23, Laws 1891.)	
Old abandoned Erie canal at Rome	906 76
(Chapter 138, Laws 1891.)	
Lift bridge at Rowe street, Rochester	12,501 19
(Chapter 168, Laws 1890, and 382, Laws 1892.)	
Deepening Erie canal	50,080 78
(Chapter 168, Laws 1890, and 382, Laws 1892.)	
Improving Champlain canal	16,543 25
(Chapter 480, Laws 1892.)	
Constructing stone dam at Little Falls	5,255 00

(Chapter 199, Laws 1892.)	
Culvert at West Utica	$3,429 51
(Chapter 484, Laws 1892.)	
Completion of Reservoir dam above Forestport pond	4,675 00
(Chapter 494, Laws 1892.)	
Raising roads and bridges on Black River reservoir above Forestport pond	7,140 00
(Chapter 469, Laws 1892.)	
Raising dam across Beaver river at Stillwater	3,304 00
(Chapter 356, Laws 1892.)	
Repairing State road between Forestport and Woodhull	1,457 38
(Chapter 249, Laws 1892.)	
Repairing State embankment of Mad brook at Sherburne	5,766 50
(Chapter 705, Laws 1892.)	
Building a dyke adjacent to the Chemung river at Corning	3,374 50
(Chapter 293, Laws 1892.)	
Removing obstruction and improving channel of Hudson river between Troy and Coxsackie	27,730 89
(Chapter 607, Laws 1892.)	
Dredging the west channel of Hudson river at Coxsackie	7,355 38
(Chapter 121, Laws 1892.)	
Repairing highway at Castorland	4,992 39
	$279,816 82

EDWARD HANNAN,
Superintendent of Public Works.

EASTERN DIVISION.

REPORT OF ASSISTANT SUPERINTENDENT OF PUBLIC WORKS.

OFFICE OF ASSISTANT SUPERINTENDENT OF PUBLIC WORKS,
EASTERN DIVISION OF THE CANALS,
ALBANY, N. Y., *October* 1, 1892.

Hon. EDWARD HANNAN, *Superintendent of Public Works:*

SIR.— In compliance with the usual custom, I submit my annual report for the fiscal year ending September 30, 1892, for the eastern division of the canals:

This division comprises that portion of the Erie canal extending from —

	Miles.
Albany to east line of Oneida county	106.24
Albany basin (one mile, Laws of 1849)	.77
Port Schuyler and West Troy side-cuts	.35
Mohawk feeder (Little Falls)	.50
Total	107.86
Champlain canal and Waterford side-cut	66.00
Pond above Troy dam	3.00
Glens Falls feeder and pond above	12.00
Total	81.00
Total Erie and Champlain canals	188.86

In the financial report of this division it will be seen that the expenditures pertaining distinctively to this division amount to $121,689.29.

The greater portion of this amount has been paid out for skilled labor and necessary material at the Cohoes shops, and for repairing and operating the dredges, tugs and scows.

During the year just closed there has been made at the shop at Cohoes and distributed to the different sections manufactured material representing money value as follows:

Section 1, Erie canal	$20,497 40
Section 2, Erie canal	3,064 47
Section 3, Erie canal	1,870 25
Section 4, Erie canal	3,207 90
Section 1, Champlain canal	3,617 14
Section 2, Champlain canal	2,663 67
Section 3, Champlain canal	1,314 39
Repairs to State dredge No. 1	169 36
Repairs to State dredge No. 2	2,491 04
Repairs to State tug Edward Murphy, Jr	109 94
Repairs to Troy dam	54 67
Totals	$39,060 23

Lock-gates have been furnished from Cohoes State shop to the various sections as follows:

	Upper gates.	Lower gates.
Section 1, Erie canal	7	12
Section 2, Erie canal	5	4
Section 3, Erie canal	3	3
Section 4, Erie canal	3	2
Section 1, Champlain canal	...	2
Section 2, Champlain canal	4	8
Section 3, Champlain canal	...	2
Total gates		55

SECTION 1 — ERIE CANAL.

On this section there were necessary repairs made to locks Nos. 7, 8, 10, 11, 13, 14 and 17 by concreting and replanking bottoms.

Eighteen new lock-gates have been placed in locks as follows: Lock No. 1, two lower gates; No. 5, one lower gate; No. 6, one lower gate; No. 9, two upper gates; No. 10, two lower and two upper gates; No. 11, two lower gates; No. 12, one upper gate; No. 15, one lower gate; No. 16, one lower gate; No. 17, two lower gates, and West Troy upper side-cut river lock, one lower gate. New balance-beams to the number of twenty have been attached to gates where necessary.

The lower Mohawk aqueduct has been repaired by replacing several trusses and caps which had become rotten. One miter-sill has been put in at lock No. 14 and one at lock No. 17. The waste-weirs on this section are in fair condition excepting the one between locks Nos. 9 and 10, where the masonry will need repairing when practicable. The bridges are in tolerably good condition, excepting the swing-bridge at West Troy upper basin, the west end abutment of which needs some new masonry.

The towpath has been graveled and repaired as far as practicable with the facilities at hand and needs considerable more gravel to put it in good condition; the distance traveled to procure material being so great, makes it necessary to have another scow to produce satisfactory service.

Some repairing was done in the spring to the slope and vertical walls from lock No. 3 to lock No. 18; the vertical wall is generally in a wretched condition, and a great deal of new work will be necessary as soon as it can be done. Navigation has been good during the entire season; very little delay has occurred and water has been maintained at a proper depth.

SECTION 2 — ERIE CANAL.

On this section repairs were made to the locks generally during the spring time and before opening of navigation, and yet a great deal more is necessary to maintain the proper standard of service to navigation, as some of the bottoms should be taken up and newly concreted, and new piers be constructed at several of them. Eight new pairs of gates have been placed in locks Nos. 19, 20, 21, 22, 24 and 27 and six new balance-beams placed thereon where necessary. Repairs were made to the aqueduct at Rexford Flats by placing thereon two new trusses, which will serve only temporarily, as a new structure is needed here. Bridge No. 52 has been replaced by an entirely new one, and bridges No. 45 and No. 55 are in process of framing; also put in new needle-beams on bridges Nos. 41, 43, 44, 47 and 48. The towpath is in good condition and berme bank strengthened in several places where needed. Nineteen hundred and sixty feet of new docking has been put down on this section during the season. One new scow has been put in operation in place of one worn out.

SECTION 3 — ERIE CANAL.

On this section during the past year the locks have been well attended to in the matter of repairs and as far as practicable they were put in good condition. New lock-gates were placed as follows: One lower gate at lock No. 28; two lower gates at lock No. 30; one upper gate at lock No. 31; two upper gates at lock No. 32, and all other gates on section were kept in repair. The aqueducts at Downing and Lasher have been rebuilt with new trunks; three of the stone abutments at the Lasher aqueduct have been thoroughly rebuilt; the Schoharie creek aqueduct was replanked and otherwise repaired, and necessary repairs made to all others. A new bridge was built at Auriesville and Nos. 87, 89, 101, 103, and 106 were painted. The towpath is in very good condition, having been graveled and repaired wherever found necessary. The slope and the vertical walls were repaired in the spring time at various places, principally at Amsterdam, Fort Hunter, Fultonville, Canajoharie, Fort Plain and St. Johnsville. Considerable docking has been put down along this section, most of which was done at Amsterdam, Fultonville, Canajoharie and Fort Plain. A standard depth of seven feet of water has been maintained during the season.

In the early part of August a break occurred in the towpath about three miles below Amsterdam, about ten feet of which was washed out to a depth of three feet, and which, but for timely discovery, might have been disastrous. The work of repairing was very promptly begun, and in a few hours navigation was resumed and all went smoothly; this was the only delay to navigation which occurred during the season on this section.

SECTION 4 — ERIE CANAL.

On this section a system of general repairs to locks and gates was carried on during the spring time before the opening of navigation. Since that time the following new gates have been placed in position: Two upper gates at lock No. 43; one upper gate at lock 38; one lower gate at lock 37; two upper gates at lock 42; one upper gate at lock 40; one upper gate at lock 35; two lower gates at lock 43; one lower gate at lock 39, and one upper gate at lock 42. The aqueducts at Mohawk, Castle Creek and Ilion were placed in good condition before the opening of navigation. The bridges on this section have been kept in good condition excepting bridge No. 137, which is not of sufficient bearing capacity to meet the requirements and has been condemned after a thorough inspection by the division engineer. The slope and vertical walls were repaired where necessary before the opening of navigation, including the reconstruction of the east retaining wall at the Ilion aqueduct. The lower pier at lock No. 39 was entirely rebuilt before the commencement of navigation in the spring. The docking has been generally repaired on this section and 200 feet of new docking has been put in between locks 38 and 39. The present State dam at Little Falls has been kept in repair until it was found necessary to replace it by a new stone dam, which is now in course of construction and will be ready for next season's opening of navigation. A uniform depth of seven and one-half feet of water has been maintained during this season's navigation. A portion of the vertical wall on the berme bank of the Ilion level needs relaying; also about 200 feet of slope wall near the head of lock 44 should be replaced by vertical wall.

SECTION 1 — CHAMPLAIN CANAL.

On this section extensive repairs were carried on during the season, before and after the opening of navigation, on the locks, which were thoroughly equipped for service, and which was satisfactorily rendered. New bridges were constructed and placed as follows: Nos. 6 and 11 on three and three-fourths mile level, No. 55 on the sixteen-mile level, and new foot-bridge at Flynn's lock; also repaired the following bridges: Nos. 22, 31, 1, 15, 32, 33, 51 and 11. Repairs were also made to lift-bridges at Mechanicville and Waterford, and all are to be repainted, except such as are to be rebuilt.

Old and worn-out docking has been replaced as follows: Three hundred feet four and five feet high below side-cut locks at Waterford; 150 feet at gravel pit on the four-mile level; also repaired old docking on sixteen-mile level; 500 feet nine feet high at the State dam at Troy; 30 feet near bridge 27. About 500 feet of sheet-piling was put in the towpath between Schuylerville and lock No. 10, where two breaks occurred in 1891, thereby strengthening the bank and making it secure. Considerable work has been done during the season by the State boat and crew in graveling and grading towpath, but as they were obliged to work on the repairs to the pier at the State dam for some considerable time, the towpath has not as yet been brought up to the proper standard. The vertical walls were repaired as far as practicable during the spring time, and the masonry on locks 8 and 9 was pointed up. The waste-weirs are in good condition, excepting Nos. 3, 4 and 5, the timber for which has been purchased, and the work of rebuilding will be completed before the opening of navigation in 1893. There has not been any detention to navigation during the season.

SECTION 2 — CHAMPLAIN CANAL.

On this section a thorough system of repairing was done to the locks and the appliances thereto in such a manner as to equip them for satisfactory service during the entire season, by pointing up the masonry on the Glens Falls feeder and the rebuilding of piers connected therewith. New lock-gates were placed in position as follows: Two lower gates in Moses Kill lock; two upper gates in lock No. 1; two upper gates and two middle gates in two-combined locks; two upper gates in Bassett's lock; two upper gates in the river lock; one in lock No. 12, the lower H. P. gate; one in lock No. 8 of the five-combined locks; H. P. gate and three T. P. gates in locks 6, 7 and 8 of the five-combined locks, and a general system of repairing and renewing various connections with the several lock-gates has been vigorously prosecuted during the past season. Moses Kill aqueduct was thoroughly cleaned and masonry repaired so as to close up a bad leak which existed there. The Glens Falls waste-weir was overhauled and necessary repairs made thereto. The sluiceways around locks No. 3 and 11, and the five-combined locks, Glens Falls feeder, have also been repaired. Six new bridges have been constructed during the season, as follows: No. 70 road bridge; No. 69 farm bridge; No. 68 road bridge; No. 74 road bridge; Nos. 3 and 10 road bridges, Glens Falls feeder; also new foot bridge at Moses Kill and Fort Edward locks, and repairing where necessary was done to all other bridges on this section.

Before the opening of navigation in the spring time the vertical walls were relayed in several places where they had fallen in, among which was a collapse of fifty feet, ten feet high, in the village of Glens Falls. During spring repairs there was docking put down as follows: One hundred lineal feet on towpath side at Smith's brickyard (five-mile level); seventy-five feet (lineal) near Stickney's bridge; 300 lineal feet towpath at Ransom's twelve-mile level, and thirty-five lineal feet at foot guard-lock, Glens Falls feeder, on towpath side.

SECTION 3 — CHAMPLAIN CANAL.

On this section the locks were repaired and pointed up where necessary during the spring repairs. The gates were put in good condition and one new upper gate was put in at lock No. 19. The waste-weirs were also repaired during spring repairs. The bridges on the section were repaired where practicable and painted, and new bridges put up in place of farm bridge No. 107, No. 132 and No. 133. Bridge No.

112 is in course of construction and will be put up in October. The towpath is in very good condition, a large amount of graveling and grading having been done during the season; all bars were removed from the bottom of canal during the month of April. Considerable docking has been put down during the season and the docks are now in good order. No accident has occurred, and no boats have been sunk on this section during the season, and no detention to navigation has occurred. The water has been kept up to the required standard and no obstructions have arisen to prevent the progress of boats through the canal.

In reviewing the condition of the structures on this division I beg to call your attention to the necessity of rebuilding bridges Nos. 5, 8, 10, 30, 31 and 32. I would recommend that iron chord bridge No. 10 at Port Schuyler be taken down and put in place of No. 8, and that the iron bridge taken down at Nineteenth street, West Troy, be used to replace bridge No. 10, which requires a much stronger bridge than the present one located there, as the traffic carried on there has increased to such an extent that it makes it perilous to cross there at present. Bridges 30, 31 and 32 are very much decayed; the chords are wooden and have been spliced.

In my report of last year I referred to the constant deterioration of the condition of the dam across the Mohawk river at Cohoes, which now is in imminent danger of giving out in several places. Too much importance can not be attached to this, as it serves as a feeder for that portion of the Champlain canal running from thence to West Troy; and also for the West Troy level of the Erie canal. So it will be seen that if such a disaster as the breaking away of this dam should occur, it would prevent navigation on the Erie canal from reaching tide-water, and thus effectually cut off water communication between the Erie canal and the Hudson river.

The docking at the south end of the dam and at the head of the guard-lock needs rebuilding, and the level between locks Nos. 2 and 3 needs bottoming out.

I would also recommend the repairing of locks Nos. 19, 22, 25 and 27 by the taking up of bottoms and concreting them, and also the erection of new piers and new bulkheads at locks Nos. 25, 26 and 27, and rebuilding of the old wooden culvert at Kline's on the seven-mile level of section 2, Erie canal. New bridges should be built at Nos. 48 and 55 and a new waste-weir on feeder level. The wall on both sides from lock 22 to the aqueduct should be relaid, and new abutments to bridge No 74 should be built. I would recommend that the portion of the vertical wall on the Ilion level, which is in a bad condition, be rebuilt; also, about 200 feet of slope wall near head of lock No. 44 be removed and replaced by a vertical wall.

I would recommend that new piers be constructed at locks Nos. 30, 31, 32, 33 and 34 and a portion of docking about 400 feet be built along the canal in the vicinity of Big Nose. Leakage through the dam across Schoharie creek has been steadily increasing during the past several years, and has now reached such a condition that in times of dry weather the creek becomes useless as a feeder. Considerable repairs are needed to the crest of the dam and apron, and some filling should be placed in rear of the crest. One hundred feet of the apron of the dam across the Hudson river at Troy has been rebuilt and repairs made to other parts thereof, at a cost of between $6,000 and $7,000, which serve only as a temporary support. The condition of this dam is such that it is only a question of time when extensive repairs or rebuilding of the structure will be necessary. By chapter 155 of the Laws of 1892, the sum of $2,000 has been appropriated for the purpose of an examination of this and the dam across the Mohawk at Cohoes. Such examination is in progress and the result thereof will be reported to the Legislature at the next session. In my last report I called your attention to the dangerous condition of about 6,800 lineal feet of embankment on the berme side of the canal, just west of Schenectady, and recommended that legislative action be asked for appropriating sufficient money to contruct a substantial vertical wall at this place. Such action has been had, but not to the extent of completing the structure as required. A contract has been let for the building of about two-thirds of the distance and a further appropriation is necessary.

On section 2 of the Champlain canal, the following bridges should be rebuilt: No. 67, on the two-mile level; No. 95, on the five-mile level, and No. 100, on the twelve-mile level at McIntyre street, Fort Edward. The Glens Falls feeder waste-weir, the only one on the feeder, located about midway of the feeder, is in bad condition and needs rebuilding before the opening of navigation next season. The repair scows, as previously reported, are in bad condition. No. 1 is about used up; we dare not leave it loaded over night without pumping it. We need two new scows and certainly should have one. A new scow is also needed at Whitehall to operate on that section. Before the opening of navigation this year temporary repairs were made to several of the aqueducts on this division. The Mohawk aqueduct had several new bents put in; the Schoharie creek aqueduct was repaired where necessary; the Pattersonville aqueduct and Downing and Lashers were almost rebuilt, and some repairs were made to the Ilion aqueduct.

The method adopted for breaking ice in the Erie canal on the winding up of navigation last year, viz., the running of the State tug Edward Murphy, Jr., up and down the canal and towing boats through, proved very efficacious in clearing the canal of boats which otherwise might have been frozen in, and suggests the substitution of steam power for that of the old system long in vogue of hauling old hulks of boats by horses, which proved very expensive, accomplishing but little with great hardship to men and teams. I would recommend that means be provided for the construction of one steam propelling motor attachment to each gravel and repair boat on each section, which could be used during the season of navigation in hauling gravel and repair boats from place to place, and thereby save considerable team labor which by the present system proves very expensive.

The bottoming out of the canal, which has been carried on for the past three years at various points under special acts of the Legislature, has been very conducive to the maintenance of a sufficient depth of water to render navigation easy and effective.

This is a work which must be more or less continued annually. The geographical situation of the canal, lying at the base of long stretches of highlands on one or both sides, and so many streams and ravines carrying earthy sediment from the uplands, causes rapid accumulations to gather in the canal, and consequently involves a large expense in removing it. It is obvious that the sum set apart for ordinary repairs would be insufficient to meet this very important outlay, and I think that the Legislature should be called upon to make an annual special appropriation for this purpose. I would recommend that the cast-iron arch bridge at Amsterdam be replaced by a stronger structure. New berme abutments are needed at bridges Nos. 30 and 74, and berme abutments should be dug behind and settled back and repairs made to wings thereof at bridges No. 17, 40, 41, 110, 180, 149, 164 and 169.

I come now to the most important feature of canal construction, and which involves on the one hand successful navigation and disaster on the other in a greater degree than any other component part thereof, the proper care of which is most conducive to the preservation of the canal system. I refer to the aqueduct arrangement. I quote from my last annual report as follows:

"Within the past year serious defects have arisen in connection with several of the large aqueducts, and which if not promptly remedied are likely to develop into most serious and disastrous interruptions to canal navigation, and consequently great embarrassment to the commerce of the State." While temporary repairs have since been made to some of these structures, they are practically not much safer than when last reported. The very expensive masonry of the two Mohawk aqueducts has been greatly damaged and is still being exposed to injury by the breaking up of the ice on the up-stream side. In my last report I called your attention to the necessity of providing means with which to meet the extensive repairs required to be made to these aqueducts, together with others, and suggested that an appeal to the Legislature be made, to appropriate sufficient money to meet any emergency, for the amount needed is beyond the scope of the ordinary repairs fund. I estimate that the amount needed to place in good condition the aqueduct system would aggregate the sum of $100,000.

In this instance I earnestly invoke your attention, with a view to securing the needed appropriation, with which to arrest disasters which are likely to occur in the heart of the season of navigation, when commercial prosperity may be at an advanced stage of progress.

The expenditures made on this division will be found in an itemized statement attached to this report.

SUMMARY *of expenditures on the eastern division of the canals from October* 1, 1891, *to September* 30, 1892.

Eastern division, office	$1,861 28
Eastern division	61,198 79
Section 1, Erie canal	5,497 71
Section 2, Erie canal	6,948 77
Section 3, Erie canal	14,178 84
Section 4, Erie canal	6,245 82
Section 1, Champlain canal	14,607 53
Section 2, Champlain canal	6,326 45
Section 3, Champlain canal	4,795 73
Total	$121,660 92

G. E. SIMMONS,
Assistant Superintendent.

DETAILED STATEMENT *of expenditures on the eastern division of the canals by G. E. Simmons, Assistant Superintendent of Public Works, from October* 1, 1891, *to September* 30, 1892, *both inclusive.*

FOR WHAT EXPENDED.	Office.	Eastern division.	ERIE CANAL.				CHAMPLAIN CANAL.		
			Section 1.	Section 2.	Section 3.	Section 4.	Section 1.	Section 2.	Section 3.
Blacksmithing		$326 23	$56 80	$84 89	$342 89	$127 52	$145 71	$313 38	$59 95
Clerk, salary of	$1,500 00								
Cement		31 05	93 60		20 15	47 05		71 51	
Coal, all uses		1,707 22	282 38	32 50	96 56		141 61	60 30	50 20
Hardware, iron castings, etc		7,121 51	500 59	269 76	791 73	414 80	646 58	412 20	323 63
Burying of dead horses		10 00	18 00		2 00	8 00			
Ice breaking		260 42			437 00	113 70	163 50		
Lumber and timber (Cohoes shop)		30,406 57							2,950 68
Lumber and timber for sections			24 51	4,787 15	9,724 16	3,461 55	7,157 49	3,288 38	
Labor and team work		1,499 27	2,891 76	905 00	2,149 12	1,500 93	5,323 43	1,597 82	139 54
Labor (skilled) Cohoes shop		10,663 12							
Labor on tug, dredges and scows		5,278 50							
Merchandise, general		447 18	322 00	374 59	310 58	221 04	17 64	9 26	98 20
Miscellaneous expenses	1 30	52 45	22 50		16 29		4 25		29 79
Oil for locks			576 00	212 94	98 00		168 58	224 00	112 00
Paints, painting, oil, etc		260 04	374 82	4 00	22 72	7 00	94 40	20 65	182 34
Postage	30 00								
Repairs to tug, dredges and scows		1,751 37	7 47	15 25		79 03		11 26	76 62
Rent (State shops), etc				204 00	50 00		208 00		
Ropes, lines, etc		24 15		7 79	38 23	187 35	73 84	13 52	38 46
Supplies to tug, dredges and scows		847 47							
Stationery, printing, etc	100 00	4 95	8 35					230 50	
Sand, gravel and clay							101 00		109 00
Stone			283 37	27 75	6 00	29 88	126 60		450 00
Telephone and telegraph service	157 12	41 15	30 55	13 40	41 37	5 45	121 50	11 54	1 63
Transportation, freight and express	72 86	57 50		9 75	31 95	43 02	14 70	62 13	87 69
Towing		408 65	5 00				104 00		86 00
Total	$1,861 28	$61,198 79	$5,497 71	$6,948 77	$14,178 84	$6,245 82	$14,607 53	$6,326 45	$4,795 73
Grand total									$121,660 92

SECTION No. 1, ERIE CANAL — T. I. HARDIN, *Superintendent.*

ANNUAL REPORT, *showing the name and number of structures or works, the different heads of expenditures, and the total cost of each, on the line of the canal under the charge of T. I. Hardin, superintendent of repairs of sixteen miles of the Erie canal, extending from west end of lower Mohawk aqueduct to Albany basin, during the* 212 *days ending April* 30, 1892.

STRUCTURES OR WORKS, ETC.	Whole number on section.	Total cost, new and old.
Locks	46	$273 91
Lock-tending (exclusive of oil)	....	9,062 05
Lock-gates	186	2,239 27
Aqueduct	1	347 30
Waste-weirs	7	50 00
Culverts	16	....
Weigh-locks	2	....
Farm bridges (wood)	9	1,420 25
Swing bridges (iron)	4	
Road bridges (wood)	4	
Road bridges (iron)	23	
Suspension bridge (wood)	1	
Suspension bridges (iron)	2	
State scows	2	....
Small boat	1	....
Ice-breakers	2	....
Under-water excavator	1	....
Lock-houses	7	....
Workshop	1	....
Watch-houses	29	....
Storehouses	2	....
Raising and repairing towpath and berme bank (not including repairs to slope walls	....	960 49
Cleaning out bottom of canal during spring repairs	....	180 12
Vertical wall	....	810 80
Docking	....	103 00
Watching canal	....	2,434 09
Other miscellaneous expenditures	....	59 00
Other work of consequence which does not come under any of the above heads, viz.:		
Superintendent's salary	....	875 00
Total	....	$18,815 28

T. I. HARDIN,
Superintendent.

SECTION No. 1, ERIE CANAL—JAMES H. BOYLAND, *Superintendent.*

ANNUAL REPORT, *showing the name and number of structures or works, the different heads of expenditures, and the total cost of each, on the line of the canal under the charge of James H. Boyland, superintent of repairs of sixteen miles of the Erie canal, extending from west end of lower Mohawk aqueduct to Albany basin, during the* 154 *days ending September* 30, 1892.

STRUCTURES OR WORKS, ETC.	Whole number on section.	Total, new and old.
Locks		$2,452 22
Lock-tending (exclusive of oil)		20,703 73
Lock-gates	186	
Aqueduct	1	
Waste-weirs	7	
Culverts	16	
Weigh-locks	2	
Farm bridges (wood)	9	2,449 00
Swing bridges (iron)	3	
Lift bridges (wood)	6	
Lift bridges (iron)	23	
Suspension bridge (wood)	1	
Suspension bridges (iron)	2	
State scows	2	
Small boat	1	
Ice breakers	2	
Under-water excavator	1	
Lock-houses	7	
Workshop	1	
Watch-houses	29	
Storehouses	2	
Raising and repairing towpath and berme bank (not including repairs to slope walls)		2,599 24
Watching canal		3,937 88
Other miscellaneous expenditures		25 75
Other work of consequence which does not come under any of the above heads, viz.:		
Superintendent's salary		625 00
Total		$32,792 77

Locks.

During the spring work repairs were made to lock bottoms at Nos. 7, 8, 10, 11, 13, 14 and 17; they were partially replanked, and where holes were found a filling was made of crushed stone and grout.

Lock gates.

Whenever practicable old gates have been repaired. Eighteen new gates have been inserted in the following locks: No. 1, two lower gates; Nos. 5 and 6, one lower gate each; No. 9, two upper gates; No.

10, two lower and two upper gates; No. 11, two lower gates; No. 12, one upper gate; No. 15, one lower gate; No. 16, one lower gate; No. 17, two lower gates; and West Troy upper side-cut, river lock, one lower gate.

Balance-beams.

Twenty balance-beams have been placed on lock gates during the season.

Aqueduct.

Eight new trusses and caps and several new posts have been inserted; the old ones had become very dangerous to navigation. Several more new ones will be necessary for the spring repairs.

The timber covering of the masonry at the upper end of the pier, which served to prevent the ice from damaging the masonry, is all gone, and a new covering should be put on to protect the masonry in the spring freshets.

Miter-sills.

Two new miter-sills have been put in, one each at locks Nos. 14 and 17.

Waste-weirs.

The waste-weir in West Troy basin has been repaired by inserting a new bulkhead and new iron gates with new hoists, and it is now in good condition; the waste-weir near the West Troy dry dock has received new woodwork throughout.

The waste-weir between locks Nos. 9 and 10 has been strengthened; the masonry in this weir is in bad condition and will need repairing before the next season of navigation.

Bridges.

The bridges on this section have been kept in good repair, and new bridges have been built at West Troy lower basin. The swing-bridge at West Troy upper basin has been thoroughly repaired, but the abutment at the west end will need to be partially rebuilt in the spring, as some of the stone has fallen out in places where it can not be relaid while the water is in the basin.

Watch-houses and lock-houses.

One new watch-house has been built, and general repairs have been made to the lock-houses.

Towpath.

One State boat has been employed in the work of graveling the towpath; considerably more scows should be put on, for in some places the banks are getting low, and the distance from which the material is obtained being quite remote, one scow and crew is unable to place the towpath in as good condition as would be desirable.

Vertical walls and slope walls.

Repairs were made to all vertical and slope walls during the spring work.

The vertical wall through the sixteen group of locks is in a very bad condition; in many places parts of it have fallen into the canal during the past season, and to remove this stone the level had to be drawn off for fear of the danger offered to boats. As has been recommended by my predecessor, a great deal of this wall should be rebuilt.

Docks.

A large amount of hemlock timber has been laid in the docks of this section during the past season, but still a great deal more docking will be required before the next season of navigation.

Depth of water.

There has been a depth of seven feet of water on all the levels during the entire season.

Navigation.

The only delay to navigation which has been observed was when a boat would sink, whereupon the level was drawn off and the boat repaired, which would not exceed two hours; it is customary in such cases to take the boat to drydock to prevent a loss on the cargo and to have the boat repaired in the shortest space of time.

Bottoming out canal.

A considerable amount of cleaning out was done during the spring repairs, the most of it between lock 18 and the lower Mohawk aqueduct, and this portion has been of much benefit to boatmen. The work was done principally by the assistant superintendent of public works under special acts of the Legislature.

RECOMMENDATIONS.

Bridges Nos. 5, 8, 10, 30, 31 and 32 all require to be rebuilt for the coming season. I would recommend that the iron chords of bridge No. 10, Port Schuyler, be transferred to bridge No. 8 on the Troy and

Albany road, and that bridge No. 10 be replaced by the iron bridge which served in the place of the present West Troy lift-bridge, a stronger bridge being requisite for No. 10 on account of the increasing traffic it is made to accommodate.

Bridges Nos. 30, 31 and 32 are wooden chord and are very much decayed, the chords having been spliced during the past summer to make them last through the season.

The bottom of culvert between locks Nos. 6 and 7 should be replanked.

Locks Nos. 11, 13, 14 and 16 are in poor condition, and in each of them the lock bottom should be repaired by taking out the old plank, removing all the loose material between foundation timbers, and filling in with concrete and grout to prevent the water from leaking into a culvert or another lock and provide against a settling in the masonry.

The locks on this section ought to be thoroughly pointed with Portland cement; a number of them are leaking very badly and demand early attention. There are some miter-sills that will have to be replaced with new ones; these miter-sills are so badly worn that it is almost impossible to stop the gates from leaking, whereas new miter-sills work better and diminish the chances of the gates being forced out.

New gates should be placed in the West Troy weigh-lock and one pair in the Albany weigh-lock. The wickets by which the weigh-locks are emptied will also need repairs.

The tumble gate in lock No. 2, Champlain canal, should be replaced by a new one.

The Cohoes dam across the Mohawk river is in a very bad condition, and there is danger that it may soon go out in some places; if this occurred it would stop navigation, for through this dam the Mohawk acts as a feeder of the Champlain canal as far as West Troy and for the West Troy level. The dock at the south end of the dam and at the head of guard-lock should be rebuilt, as it has rotted considerably and some of it has already fallen into the river.

The level between lock No. 2 and guard No. 3, Champlain canal, should be bottomed out. Boats frequently run aground on bars which have formed on this level, and these obstacles should be removed as soon as practicable.

JAMES H. BOYLAND,
Superintendent.

SECTION 2, ERIE CANAL — JAMES COLLINS, *Superintendent.*

ANNUAL REPORT, *showing the name and number of structures or works, the different heads of expenditures and the total cost of each, on the line of the canal under the charge of James Collins, superintendent of repairs of thirty-two miles of the Erie canal, extending from the head of lower Mohawk aqueduct to head of lock* 27, *during the* 366 *days ending September* 30, 1892.

STRUCTURES OR WORKS, ETC.	Whole number on section.	Cost of repairs of old, etc.	Total, new and old.
Locks	19	$1,307 92	$1,307 92
Lock-tending (exclusive of oil)	....	10,710 00	10,710 00
Lock-gates	74	....	....
Aqueducts	3	....	....
Waste-weirs	2	710 65	710 65
Culverts	18	....	....
Farm bridges (wood) Farm bridges (iron) Road bridges (wood) Road bridges (iron) Towpath bridges (wood) Towpath bridges (iron)	47	920 30	920 30
State scows	3	....	....
Ice-breakers	1	....	....
Lock-houses	9	....	....
Workshops	1	....	....
Watch-houses	9	....	....
Storehouses	1	....	....
Raising and repairing towpath and berme bank (not including repairs to slope-walls)	....	5,794 82	5,794 82
Watching canal	....	1,715 00	1,715 00
Other work of consequence which does not come under any of the above heads, viz.:			
Watching State house	....	240 00	240 00
Special foreman	....	549 00	549 00
Diver	....	350 00	350 00
Feeder tender	....	105 00	105 00
Publishing abstracts	....	48 25	48 25
Superintendent's salary	....	1,500 00	1,500 00
Total	....	....	$23,950 94

Locks.

All the locks on section were repaired during the work of preparing for navigation in the spring.

Lock-gates.

Eight new pairs of gates and six new balance-beams were put in at locks Nos. 18, 20, 21, 22, 24 and 27.

Aqueducts.

Two trusses were inserted in the aqueduct at Rexford Flats. The aqueduct should be entirely rebuilt.

Bridges.

Bridge No. 52 has been replaced by a new one. I am now occupied in framing bridges Nos. 45 and 55, and inserting thirteen needle-beams in bridges Nos. 41, 43, 44, 47 and 48.

Towpath.

The towpath has been repaired and graveled and the berme bank has been strengthened at various points. One leak was discovered in the berme bank, between locks Nos. 22 and 23, and it was repaired before any damage was caused to navigation.

Docks.

A total amount of 1,960 feet of new dock has been put in along the line of section.

State scows.

One new State scow was put on to replace an abandoned scow.

RECOMMENDATIONS.

I would recommend the following repairs as necessary for the coming season: At locks Nos. 19, 22, 25 and 27 the bottoms should be taken up and concrete placed therein; new piers and bulkheads should be put in at locks Nos. 25, 26 and 27; the old wooden culvert at Kline's, on the seven-mile level, is becoming rotten and it should be rebuilt; a new bridge should be erected at Nos. 48 and 55; the waste-weir on the feeder level ought to be rebuilt; the walls on both sides of the canal, from lock No. 22 to the aqueduct, are in such condition that they ought to be relaid; and new abutments should be built under Pattersonville bridge No. 74.

JAMES COLLINS,
Superintendent.

SECTION No. 3, ERIE CANAL.—R. F. OWENS, *Superintendent.*

ANNUAL REPORT, *showing the name and number of structures or works, the different heads of expenditures, and the total cost of each, on the line of the canal under the charge of R. F. Owens, superintendent of repairs of thirty-eight miles of the Erie canal, extending from head of lock* 27 *to head of lock* 34, *during the* 366 *days ending September* 30, 1892.

STRUCTURES OR WORKS, ETC.	Whole number on section.	Cost of repairs of old, etc.	Total, new and old.
Locks	14	$719 88	$719 88
Lock-tending (exclusive of oil)	....	8,330 00	8,330 00
Lock-gates	56	406 00	406 00
Aqueducts	8	689 80	689 80
Waste-weirs	4	....	....
Culverts	....	176 30	176 30
Farm bridges (wood)	42	2,539 36	2,539 36
Farm bridges (iron)	7		
Road bridges (wood)	7		
Road bridges (iron)	5		
Towpath bridges (wood)	5		
State scows	2	....	....
Ice-breakers	2	....	....
Lock-houses	7	....	....
Workshops	2	....	....
Watch-houses	2	511 87	511 87
Timber sheds	2	....	....
Piling machines	1	....	....
Raising and repairing towpath and berme bank (not including repairs to slope walls)	....	3,040 20	3,040 20
Grouting bottom of canal during spring repairs	....	272 30	272 30
Cleaning and repairing at railroad feeder	....	123 60	123 60
Dams (672 feet)	....	....	....
Slope and vertical walls	....	440 00	440 00
Docking	....	1,383 40	1,383 40
Repairs of breaches	....	370 76	370 76
Watching canal	....	1,470 00	1,470 00
Other work of consequence which does not come under any of the above heads, viz.:			
Feeder tending	....	525 00	525 00
Unloading and piling lumber	....	182 85	182 85
Special foreman	....	219 60	219 60
Publishing abstracts	....	68 00	68 00
Superintendent's salary	....	....	1,500 00
Total	....	....	$22,968 92

Locks.

All locks have been carefully inspected and repaired where it was found necessary. These repairs consisted in cleaning out wells, pointing up walls and repairing miter-sills.

Lock gates.

New gates have been put into the following locks: One fore gate, towpath side, at lock 28; two fore gates, towpath side, at lock 30; one upper gate, towpath side, at lock 31; two upper gates, towpath side, at lock 32.

All other gates on section 3 have been properly repaired.

Aqueducts.

The aqueducts at Downing and Lasher have been rebuilt with new trunks, etc. Three stone abutments at the Lasher aqueduct were taken down and rebuilt. The Schoharie creek aqueduct was replanked and braced in different portions of it, and all other aqueducts received proper attention.

Bridges.

All bridges on section No. 3 have been repaired with new braces, floor timbers, needle-beams and plank. A new bridge was rebuilt at Auriesville, and Nos. 87, 89, 101, 103 and 106 were painted.

Towpath.

The towpath, for the whole length of the section, and principally in the worst places, has been raised and graveled. One scow was employed in this work all season, and now I am happy to aver that the towpath has never been in a more satisfactory condition.

Slope and vertical walls.

During the work of spring repairs all such portions of slope and vertical walls as had fallen or were about to fall were rebuilt. The work was done chiefly at Amsterdam, Fort Hunter, Fultonville, Canajoharie, Fort Plain and St. Johnsville.

Docks.

Before the opening of navigation and at various times during the season, new dock has been put in at many places along the section wherever it was deemed necessary. Most of the docking was done at Amsterdam, Fultonville, Canajoharie and Fort Plain.

Depth of water.

During the entire season the depth of water has been fully seven feet over the miter-sills.

Breaches.

In the early part of August about ten feet of towpath three feet in depth went out at a point three miles below Amsterdam. The break was quickly repaired, and hence navigation was scarcely delayed.

This was the only break that occurred during the entire season, and was probably due to the heavy rain storm that took place about this time.

Cleaning canal.

The bottom of the canal, which was in a very bad condition last spring, owing doubtless to the heavy rains, was thoroughly cleaned. All the bars were speedily removed, as well as other material that might act as an obstacle to navigation.

Sunken boats.

Four boats have sunk on this section during the season. Three of them, the A. H. Gordon, Louis Bedell, and Mary, sprang aleak and went down between Amsterdam and Fort Hunter; they were towed to dry dock at Amsterdam with the assistance of the State scow. The fourth boat was loaded with rags and resin and caught fire between Canajoharie and Fort Plain, where it sank and now lies, close to the berme bank; an attempt was made to raise it by the help of the State pump boat, but the effort was ineffectual.

RECOMMENDATIONS.

I would most respectfully recommend that a new lower gate be inserted at lock 28; that the Schoharie creek aqueduct be repaired, as its sides and bottom have almost rotted out, and its two piers, Nos. 5 and 6, have settled about eight inches, thus needing to be raised and cribbed and new timbers to be placed on all the thirteen piers to break the ice; that the aqueducts at Spraker and Fort Plain be rebuilt entirely new; that the paving in the creek at Fort Plain be replaced so as to prevent the undermining of the aqueduct; that the stone abutments at the Fort Plain aqueduct be taken down and rebuilt, as they are in a very bad condition; that new piers be built at locks 30, 31, 32, 33 and 34; that docking be done at Big Nose; that the Schoharie creek dam be put in a condition to feed the canal at Fort Hunter. In its present condition no water can be obtained unless during the time of high water, hence a number of miles of canal east of this point cannot be fed from this source.

R. F. OWENS,
Superintendent of Section 3.

AMSTERDAM, *October* 1, 1892.

SECTION No. 4, ERIE CANAL — H. M. WOOD, *Superintendent.*

ANNUAL REPORT, *showing the name and number of structures or works, the different heads of expenditures, and the total cost of each, on the line of the canal under the charge of H. M. Wood, superintendent of repairs of twenty-nine miles of the Erie canal, extending from head of lock No.* 34 *to east line of Oneida county, during the* 366 *days ending September* 30, 1892.

STRUCTURES OR WORKS, ETC.	Whole number on section.	Cost of repairs of old, etc.	Total, new and old.
Locks and gates	22	$2,047 86	$2,047 86
Lock-tending (exclusive of oil)	44	13,090 00	13,090 00
Lock-gates	88	....	....
Aqueducts	5	527 20	527 20
Waste-weirs	7	62 00	62 00
Culverts	6	62 00	62 00
Farm bridges (wood)	Of all kinds 50	862 17	862 17
Farm bridges (iron)			
Road bridges (wood)			
Road bridges (iron)			
Towpath bridges (wood)			
Towpath bridges (iron)			
State scows	3	....	....
Ice-breakers	2	80 40	80 40
Lock-houses	5	....	....
Workshops	2	....	....
Watch-houses	11	....	....
Timber sheds	2	....	....
Raising and repairing towpath and berme bank (not including repairs to slope walls)	....	1,851 75	1,851 75
Dam (feet, 1,000)	1	....	....
Slope wall	....	1,021 55	1,021 55
Docking and railing	....	1,605 89	1,605 89
Watching canal	....	1.780 00	1,780 00
Other work of consequence which does not come under any of the above heads, viz.:			
Ice breaking	....	28 80	28 80
Unloading lumber	....	256 50	256 50
Piers	....	45 60	45 60
Superintendent's salary	....	1,500 00	1,500 00
Total	....	....	$24,821 72

Locks and Lock-gates.

The locks and gates on this section were, as far as could be, thoroughly repaired before the opening of navigation. During the season gates have been placed in locks as follows: One lower gate in each of locks Nos. 37 and 39; two lower gates in No. 43; one upper gate in Nos. 35, 38, 40 and 42; and two upper gates in Nos. 42 and 43.

Lock-tending.

This section includes eleven double locks, Nos. 35 to 45, inclusive, in all requiring the services of forty-four men for seven months.

Aqueducts.

Two spans of the Mohawk aqueduct, three spans of the Castle creek, and one of the Ilion aqueduct are taken up each year at the close of navigation to prevent damage to property from the overflow of the creeks. These aqueducts were put in repair and relaid before canal opening.

Bridges.

The bridges on this section have been kept in a good state of repair. One frame farm bridge (No. 166) has been erected.

Under this head I desire to call your attention to the condition of the iron road bridge at Little Falls. The bridge is now condemned and is totally unsafe for the amount of traffic it receives.

Walls.

The slope walls and vertical walls on this section were relaid wherever necessary before navigation was opened. This work included the relaying of the east retaining wall at the Ilion aqueduct bridge.

Piers.

The lower pier at lock No. 39, Little Falls, was entirely rebuilt before the opening of navigation.

Docks and railings.

Two hundred feet of dock has been laid between locks Nos. 38 and 39, and railing fixed on the same, to insure the safety of teams. The docks along the whole line of section have been kept in a good state of repair.

Dams.

The present State dam has been repaired in the customary manner. A new stone dam is now in course of construction and will be ready for the coming season.

Water.

A uniform depth of seven and one-half feet of water has been maintained on all the levels in this section.

Bottoming out canal.

All bars and other obstructions to navigation were removed before the opening of navigation.

REMARKS.

I would recommend that a portion of the vertical wall on the berme bank of the Ilion level be relaid, as at present it is in bad condition.

About 200 feet of the slope wall near the head of lock No. 44 should be removed and a vertical wall built in its stead.

H. M. WOOD,
Superintendent.

October 14, 1892.

SECTION No. 1, CHAMPLAIN CANAL — JAMES DOUGREY, *Supt.*

ANNUAL REPORT *showing the name and number of structures or works, the different heads of expenditures, and the total cost of each, on the line of the canal under the charge of James Dougrey, Jr., superintendent of repairs of thirty-two miles of the Champlain canal, extending from north end of Cohoes bridge to foot of Lock No.* 11, *during the* 366 *days ending September* 30, 1892.

STRUCTURES OR WORKS, ETC.	Whole number on section.	Total cost, new and old.
Locks	11	
Lock and bridge tending (exclusive of oil)		$6,572 66
Lock-gates	44	
Aqueducts	1	
Waste-weirs	10	
Culverts	7	
Weigh-locks	1	
Farm bridges (wood)	21	
Farm bridges (iron)	15	
Road bridges (wood)	10	
Road bridges (iron)	13	
Towpath bridges (wood)	12	
Lift bridges (iron)	2	
Road bridges over outlet of weigh-lock	3	
State scows	3	
Ice-breakers	2	
Lock-houses	7	
Workshops	1	
Watch-houses	8	
Storehouses	1	
Raising and repairing towpath and berme bank, (not including repairs to slope walls)		6,230 25
Cleaning out bottom of canal during spring repairs		1,734 25
Dams (740 + 1,100 = 1,840)	2	
Watching canal, waste-weirs and State property		2,950 00
Other work of consequence which does not come under any of the above heads, viz.:		
Carpenters, etc		4,954 35
Sir Gallett (steam pump)		32 50
Abstracts		62 00
Superintendent's salary		1,500 00
Total		$24,036 01

Locks.

On this section we have made the following repairs:

Lock No. 5. Put in two new wedges, new bolts in lever box frame, new top on tumble-gate and four new arms in swing-gates.

Lock No. 6. New pair elbows, and new frame for same, connecting rods taken out, straightened and replaced; new shieve and casting for same; also put in new elbow bolts for tumble-gate chains.

Lock No. 7. Two new wedges and caps for same; one new shieve, new bolts throughout for same, new chain for tumble-gate; also straightened shaft at tumble-gate.

Lock No. 8. Put in new wedges, new bolts in lever box frame; straightened connecting rods at tumble-gate; pumped and cleaned out same; put in stop-gate and repaired wickets.

Lock No. 9. Repaired tumble-gate; put in two new elbow frames in same; new planks on miter-sill; took out old and put in two new swing-gates; pumped and cleaned out same; put in stop-gate and repaired connecting rods and elbows.

Lock No. 10. Took out old and put in four new swing-gates; four new balance-beams in same.

Bridges.

Took down old frames and put up new bridges as follows: No. 6 and 11 on three and three-quarter-mile level and No. 55 on sixteen-mile level. New foot-bridge at Flins lock. Also made the following repairs to bridges: Replanked bridges Nos. 12, 31, 1, 15, 32, 33, 51 and 11- The sidewalk of bridge No. 19 was repaired and replanked; also forty feet of towing-path above lock No. 10; repairs have been made to lift. bridges at Mechancville and Waterford. All the bridges with the exception of the ones to be rebuilt will be painted.

Docking.

Old docking has been taken out and new put in as follows: Three hundred feet four and five feet high below side-cut locks at Waterford; 150 feet at gravel-pit on four-mile level; also repaired several pieces of old docking on sixteen-mile level; repaired the State dam at Troy by putting in 500 feet of new docking nine feet high and taking out the old; filled the same in with gravel and paved the same over with stone to prevent it from being washed out; also thirty feet new docking near bridge No. 27.

Towing-path.

As stated in the preceding annual report, the towing-path bank between Schuylerville and lock No. 10, where the two breaks occurred in 1891, was strengthened by putting in 500 feet of sheet-piling and puddling same through the center of towpath; also sheet-piled back of towpath in bank, making it secure so we have had no trouble there the past season. The State boat men have been working on the State dam for some time this season, and the towpath has not as yet been brought up to proper standard, but I am doing all that is possible to do with good gravel to put the same in first-class condition.

Vertical wall.

During spring repairs several pieces of vertical walls that had fallen in on the different levels were rebuilt and locks No 8 and 9 pointed.

Waste-weirs.

The repairs on waste-weirs during the past year have been quite extensive. Waste-weirs No. 3, 4 and 5 are in very bad condition. The timber has been purchased to rebuild them before the opening of navigation, 1893. All have been repaired in thorough manner and kept in working order.

Prism of canal.

During spring repairs all bars were removed and bottom of canal cleaned out before canal opening.

Sunken boats.

Several old boats have sunk during the season. All were raised and put on dry-dock without detention to navigation.

RECOMMENDATIONS.

I would most respectfully recommend the following improvements: Locks No. 5 and 8 should have new swing-gates; lock No. 6 new tumble-gate. New bridges, as follows: Nos. 19, 21, 32, 33 and 54 on sixteen-mile level. The feeders at lock No. 10 should be rebuilt; also the docking from lock No. 10 to the river bridge, and also the docking from lock 10 to the pier on berme bank side; also about thirty feet below the same lock.

Respectfully.

JAMES DOUGREY, JR.,
Superintendent Canal Repairs.

STILLWATER, *October* 1, 1892.

SECTION No. 2, CHAMPLAIN CANAL — JOHN H. GANLEY, *Supt.*

ANNUAL REPORT *showing the name and number of structures or works, the different heads of expenditures, and the total cost of each, on the lines of the canal under the charge of John H. Ganley, superintendent of repairs of twenty-six miles of the Champlain canal, extending from foot of first lock north of Saratoga dam to Dunham's basin, including Glens Falls feeder and pond above, during the* 366 *days ending September* 30, 1892.

STRUCTURES OR WORKS, ETC.	Whole number on section.	Cost of new structures.	Cost of repairs of old, etc.	Total new and old.
Locks	19	....	$451 25	$451 25
Lock-tending (exclusive of oil)	......	....	9,454 67	9,454 67
Lock-gates	63	$885 00	694 80	1,579 80
Aqueducts	3	....	23 00	23 00
Waste-weirs	7	....	43 50	43 50
Culverts	9	....	....	....
Sluiceways around lock	8	....	52 00	52 00
Bridges of all kinds				
Farm bridges (wood)	14	....	....	....
Farm bridges (iron)	......	....	....	....
Road bridges (wood)	24	....	....	....
Road bridges (iron)	5	325 00	506 15	831 15
Towpath bridges (wood)	5	....	....	....
Towpath bridges (iron)	2	....	....	....
Foot bridge (wood)	19	....	....	....
State scows	2	....	65 00	65 00
Collector's office	1	....	....	....
Ice-breakers	2	....	....	....
Spillways	1	....	....	....
Lock-houses	4	....	....	....
Workshops	1	....	....	....
Watch-houses	12	....	43 50	43 50
Timber-sheds	2	....	....	....
Raising and repairing towpath and berme bank (not including repairs to slope walls)	......	....	7,420 90	7,420 90
Cleaning out bottom of canal during spring repairs	......	....	1,048 48	1,048 48
Leaks	......	....	51 00	51 00
Dams (feet, 900)	1	....	....	....
Wall, vertical	......	....	144 00	144 00
Docking	......	....	295 00	295 00
Watching canal	......	....	3,328 91	3,328 91
Other miscellaneous expenditures	......	....	87 20	87 20
Other work of consequence which does not come under any of the above heads, viz.:				
Harbor master, Glens Falls	......	....	420 00	420 00
Superintendent's salary	......	....	....	1,500 00
Totals	......	$1,210 00	$24,129 36	$26,839 36

Vertical wall.

During the winter portions of wall fell in at Kinne's, Montgomery's and Berkley's storehouses, and near Ryan's five-mile level, besides some fifty linear feet ten feet high which fell asunder in the village of Glens Falls, together with a few smaller pieces along section. All such portions were relaid before the opening of navigation.

Docks.

During spring repairs the following quantities of dock were laid along the line of section: 100 lineal feet at Smith's brickyard on the five-mile level; seventy-five lineal feet near Stickney's bridge, five-mile level, on the towpath side; 300 lineal feet at Ransom's, twelve-mile level, towpath side; and thirty-five lineal feet on the towpath side at foot of guard lock, Glens Falls feeder.

Leaks.

Several bad "sink holes" were found in the bottom of the Glens Falls feeder in the work of cleaning out canal bottom. They were cleaned out down to bottom and filled with concrete.

Muskrats bored a hole through the towpath on the three-mile level. It was discovered while letting the water into canal, and the level was about full; the water was drawn down, the piece of towpath dug out, sheet-piled and thoroughly puddled.

There have been several small leaks during the season, but they were timely discovered and repaired by the section men.

Breaches.

On Saturday morning November 28, 1891, about eighty feet of the towpath went out just south of Sherman's lime kiln, Glens Falls feeder, to a depth of five feet below the bottom of the canal, and down to rock bottom, washing out some two hundred feet of canal bottom for two feet in depth. It was caused by the water having worked through the bottom of canal to a flat shelving rock, and as there was no dock or wall at this place, nothing prevented the rock from going out. It being so near the close of navigation — but few boats were still to pass, two bound south on the Champlain and two that might go through the feeder — it was thought advisable not to attempt to repair the break until spring, but the place was fixed temporarily so as to let in water enough to pass the boats through that they might get into winter quarters, and sufficient water was kept through the winter to prevent the bottom of the feeder from freezing or heaving. In April the breach was thoroughly repaired with heavy dock built in front, bolted down to the rock, sheet-piled and puddled; a crib seven feet high and twelve feet wide was put in at the back, bolted to the rock bottom and filled and loaded with stone.

Watching canal.

Reliable men have been employed both night and day throughout the season, regulating the feeding of water, watching the high and dangerous embankments, and assisting in navigation work.

Navigation.

There has been plenty of water throughout the season, and a depth of five feet has been maintained on each miter-sill. Navigation during the season just closed has been very successful over this section. No detention has occurred to boatmen. Excessive rains at different times during the season caused the levels to be flooded by the inpouring from the numerous streams tributary to the canal, and the levels would have overflowed, causing serious breaks, but for the careful watching and the drawing off of all surplus water by the patrolmen.

Structures necessary to be rebuilt.

Bridge No. 67, two-mile level (Taylor's farm); No. 95, five-mile level (Potter's farm); No. 100, twelve-mile level, McIntyre street, Fort Edward, are all in bad shape and need to be replaced with new ones this winter. Green's road bridge, Glens Falls feeder, needs new chords, which should be put in at the close of navigation; they are not safe for the heavy loads which pass over this bridge.

The Glens Falls feeder waste-weir, the only one on feeder, and located about midway, is in a very bad condition and should be rebuilt before next opening of navigation. It was repaired last spring but was only trusted to stand for this season. The Moses Kill and Fort Miller locks need new tumble-gates and timber work from the foundations upward; the Fort Miller gate is liable to go out at any time, and it has been necessary to handle it with the greatest care during the whole season.

As previously reported, the repair scows are not very good; No. 1 is virtually played out, and I cannot leave her loaded over night without a man to pump out the water that might sink the scow.

This section needs two new repair scows and it certainly ought to have one good repair scow.

Respectfully submitted.

JOHN H. GANLEY,
Superintendent.

FORT EDWARD, *October* 14, 1892.

SECTION No. 3, CHAMPLAIN CANAL — SYLVESTER MAHAN, *Superintendent.*

ANNUAL REPORT, *showing the name and number of structures or works, the different heads of expenditures, and the total cost of each, on the line of the canal under the charge of Sylvester Mahan, superintendent of repairs of twenty-two miles of the Champlain canal, extending from Dunham's Basin to Lake Champlain, during the fiscal year ending September* 30, 1892.

STRUCTURES OR WORKS, ETC.	Whole number on section.	Total cost, new and old.
Locks	8	$337 50
Lock-tending (exclusive of oil)	....	4,480 00
Lock-gates	26	....
Waste-weirs	9	491 75
Farm bridges (wood) Farm bridges (iron) Road bridges (wood) Road bridges (iron) Towpath bridges (wood) Towpath bridges (iron)	36	1,583 50
State scows	2	....
Small boat	1	....
Ice-breakers	2	....
Lock-houses	5	....
Workshop	1	....
Storehouse	1	....
Raising and repairing towpath and berme bank (not including repairs to slope walls)	....	5,808 00
Cleaning out bottom of canal during spring repairs	....	2,119 25
Vertical wall	....	350 25
Watching canal	....	1,390 50
Watching canal property	....	360 00
Other work of consequence which does not come under any of the above heads, viz.:		
Publishing abstracts	....	37 50
Superintendent's salary	....	1,500 00
Total	....	$18,458 25

Locks.

The masonry in all the locks on this section was pointed and the locks thoroughly repaired during the spring.

Lock gates.

The gates were replanked and otherwise repaired as found necessary. One new upper sill was put in at lock No. 19.

Waste weirs

Were put in good order during spring repairs.

Bridges.

The bridges have been more or less repaired, and a few new bridges have been erected in the place of old ones. Painting has been done wherever needed.

The following new bridges have been built and put in place: Farm bridge No. 107, Whipple combination; farm bridge No. 132, Whipple combination; and farm bridge No. 133, Whipple combination. Bridge No. 112 will be put up some time during October.

Culverts.

The culverts were cleaned out during the spring work.

Towpath.

The condition of the towpath is now quite good. A large amount of graveling has been done during the season. Most of the gravel for the five-mile level was obtained at Cold Springs and was of an excellent quality.

Canal bottom.

In April all bars were removed and the canal cleaned in a thorough manner.

Docks.

A large number of dock sticks have been put in during the season, and the docks are all in fair condition.

Watching canal.

Competent men have been employed as patrolmen and the best attention and watchfulness secured. No breaks or accidents have occurred during the season.

Sunken boats.

There has been no delay to navigation from sunken boats.

Water.

The water has been well up on all levels of the section, and no difficulty has been met with anywhere from the condition of the levels.

Navigation.

The entire section has been free from detentions or crowding of boats, and nothing has occurred to hinder boats from moving at any time.

Houses.

The State house and the lock houses are in good condition, excepting the houses at locks Nos. 18 and 19; the house at No. 18 was burned down. New houses will have to be built in their place.

Walls.

A large portion of slope wall has been relaid during the year, extending along the line of the towpath.

RECOMMENDATIONS.

I would respectfully recommend the following work and improvements which should be completed before the opening of next season:

The woodwork of Eastman waste-weir on the five-mile level should be rebuilt.

One set of lock-gates should be placed in lock No. 21.

Towposts should be set for the lower gates of lock No. 16; and a miter-sill should be given lock No. 23, upper end.

Bridges Nos. 111, 114, and 125 ought to be rebuilt.

A new State boat should be provided for the Whitehall crew, as the old one is in bad condition.

SYLVESTER MAHAN,
Superintendent.

WHITEHALL, N. Y., *October* 1, 1892

MIDDLE DIVISION.

Office of Assistant Superintendent of Public Works,
Syracuse, N. Y., *December* 1, 1892.

Hon. Edward Hannan, *Superintendent of Public Works, Albany, N. Y.:*

Dear Sir.—In accordance with the usual custom I herewith submit my annual report as assistant superintendent in charge of the middle division, New York State canals, for the fiscal year ending September 30, 1892.

The middle division consists of three sections of the Erie, Nos. 5, 6 and 7, being all of the Erie in Oneida, Madison, Onondaga, Cayuga and Seneca counties; the Black River canal, two sections; the Oswego canal, two sections, and the Cayuga and Seneca canal. It has about 303 miles of navigable canals and rivers, and about forty-nine miles of artificial feeders supplied by twenty-five lakes and reservoirs, with an aggregate acreage of 20,000 acres.

There are on the division 159 locks, twenty-three aqueducts, 137 culverts, 148 waste-weirs and spillways, forty-two dams, 455 bridges and eight repair shops.

More caution has been required to guard against too much water rather than the anxiety for enough, as was the case the past year. The more than abundant rainfall insures a full supply in our reservoirs for the next season's use.

On the first day of October, 1892, the several reservoirs located south of the Erie canal showed a reduction in aggregate depth of sixty-seven feet eleven inches; at the same date last year the aggregate reduction was 121 feet nine inches. The Black River reservoirs, or those located on the north side of the Erie canal, all showed a corresponding reduction in depth of water at the close of the fiscal year.

The delays and interruptions to navigation on this division caused by breaks and otherwise are as follows:

On October 25, 1891, a Rome, Watertown and Ogdensburg locomotive, while the draw of the bridge was open, plunged into the Erie canal at Franklin street, Syracuse, delaying navigation almost six hours.

October 30, 1891, a canal boat ran into the east pier of the weigh-lock at Syracuse, and sunk diagonally across the canal, delaying navigation at this point about fifteen hours.

November 27, 1891, a break occurred in the towpath bank of the Baldwinsville side-cut at Bliss & Suydam's mill. All the men that could be worked were employed and the break repaired without serious interruption to canal traffic.

May 4, 1892, a few days after the opening of the canals, a bad leak was discovered in the towpath bank east of lock No. 47, near the New York Central railroad tunnel. The stop-gate was raised and the level partially drawn between there and lock No. 47 ; the leak was repaired during the night, causing little delay to west-bound boats.

June 13, 1892, a break occurred at a culvert on the towpath side of the canal at Weedsport ; by prompt action on the part of the State, the damage was repaired and navigation resumed in forty-eight hours.

July 13, 1892, a break occurred on section 1 of the Black River canal at Hicks Mills ; about fifty feet of the towpath bank was washed out from six to ten feet below canal bottom. This break was caused by the collapse of an old raceway under the canal at that place which was used to convey the waste water from the mill. Navigation was interrupted about four days.

Prior to the opening of the canals, under chapter 382, Laws of 1892, the towpath side of the prism of the Erie canal was bottomed out at the worst places all along this division at an expense of $12,227.29. Since the opening of navigation the State dredge has been at work continuously on section 5 removing the deposit on the berme side of the prism. Many low places in the banks have been raised in this way, so that the full amount of water can be carried with safety.

I have expended for dredging $2,026.53. I would respectfully suggest that the Legislature be asked to appropriate funds to be used to clean out some of the numerous State ditches along the line of the canal, and thus avoid claims for damages by overflow upon adjacent lands and nuisances resulting from accumulation and decay of vegetable matter, etc.

I have expended for ordinary repairs $58,124.08 and under special appropriations $26.812.82. For a detailed statement of disbursements see financial column on another page of this report.

For a description of the repairs and work performed during the fiscal year I respectfully refer you to the annual reports of the several superintendents of canal repairs, who give a statement of where the work was performed, with such recommendations for the future as they deem necessary, on their respective sections.

Yours respectfully.

J. H. FLANAGAN,

Assistant Superintendent of Public Works, Middle Division.

DETAILED STATEMENT *of expenditures on the middle division New York State canals, by Hon. James H. Flanagan, Assistant Superintendent of Public Works, for the fiscal year ending September* 30, 1892.

ITEMS.	Middle division.	Section 5, Erie.	Section 6, Erie.	Section 7, Erie.	Section 1, Oswego.	Section 2, Oswego.	Section 1, Black River.	Section 2, Black River.	Chenango.	Cayuga and Seneca.	Office expense.	Totals.
Blacksmithing	$329 00	$381 56	$437 59	$280 95	$320 90	$685 07	$1,575 50	$346 25		$114 75		$4,471 57
Coal	110 50	6 90	49 00			89 75				17 04	$254 50	527 69
Hardware	531 75	345 47	1,169 00	288 38	136 00	966 30	687 90	416 64		120 32		4,611 76
Burying horses			32 00	26 00								58 00
Lights on locks			263 90									263 90
Lumber		3,580 97	5,187 50	2,888 03	1,429 40	1,572 45	5,978 28	1,414 37		1,195 84		23,246 84
Labor and team	2,815 70	2,007 95	6,395 82	559 02	584 20	1,790 00	3,505 80	829 60	$384 55	7 57	210 00	19,090 21
Sundry expense		130 02	108 91		25 30	5 83	127 30	25 43	25 20	13 83	65 50	527 32
Paint, oil, etc	13 44	37 45	60 80			50 41	35 67	16 20		9 86		223 83
Rope		27 55	434 50	457 07	17 50	68 42	69 60	22 20				1,096 84
Stone		162 64			63 00	156 70				17 59		390 93
Telephone and telegraph	140 75	85 51		10 46		13 72	77 40	44 41		4 47	72 77	449 49
Printing	18 70											18 70
Reservoir tending			720 00	120 00			298 00		720 00			1,858 00
Clerk hire											1,200 00	1,200 00
Stationery											40 00	40 00
Totals	$3,959 84	$6,766 02	$17,859 02	$4,629 91	$2,576 30	$5,398 65	$12,355 45	$3,115 10	$1,129 75	$1,501 27	$1,842 77	$58,134 08

SECTION No. 5, ERIE CANAL—JOHN W. MANLEY, *Supt.*

ANNUAL REPORT *showing the name and number of structures or works, the different heads of expenditures, and the cost of each on the line of the canal under the charge of John W. Manley, superintendent of repairs of thirty-nine miles of the Erie canal, extending from east line of Oneida county to Canastota, Madison county, during the fiscal year ending September* 30, 1892.

STRUCTURES OR WORKS, ETC.	Whole number on section.	Cost of repairs of old, &c.	Total, new and old.
Locks	1	$146 35	$146 35
Lock-tending (exclusive of oil)	....	....	1,218 40
Lock-gates	10	....	....
Aqueducts	3	186 19	186 19
Waste-weirs	5	297 10	297 10
Culverts	38	447 85	447 85
Farm bridges (wood)	12	....	....
do (iron)	....	....	....
Road bridges (wood)	22	1,417 77	1,417 77
do (iron)	48	....	....
Towpath bridges (wood)	3	....	....
do do (iron)	1	....	....
State scows	2	....	....
Small boats	1	....	....
Ice-breakers	2	....	....
Lock-houses	1	....	....
Workshops	2	....	....
Watch-houses	4	....	....
Storehouses	1	....	....
Raising and repairing towpath and berme bank, not including repairs to slope walls	....	5,246 94	5,246 94
Dams (feet, 452)	4	147 22	147 22
Docking	....	282 82	282 82
Breaking ice and assisting boats in consequence of ice	....	....	120 06
Watching canal	....	....	1,780 00
Other work of consequence which does not come under any of the above heads, viz.:			
Feeders	3	328 23	328 23
Feeder tending	....	....	415 00
Lift-bridge tending	....	....	1,114 90
Publishing abstracts	....	....	45 96
Superintendent's salary	....	....	1,500 00
Total	....	....	$14,694 79

Bottoming out.

Prior to the opening of navigation the canal was bottomed and cleaned out at the following places:

On the towpath side from the eastern end of the section to Gilbert street bridge, Utica; on both sides from Gilbert street bridge through

Utica, west to Whitesboro road bridge; on towpath side from Whitesboro road bridge to Clinton street bridge, Whitesboro; on both sides from Clinton street bridge to Watkins street bridge, Whitesboro; on towpath side from Christman's farm bridge, Oriskany, to De Puyster street bridge, Rome; on both sides from De Pyster street bridge through Rome, west to Doxtader avenue bridge; on towpath side from Doxtader avenue bridge to Fort Bull waste-weir; on towpath side from Seun's farm bridge to Main street bridge, New London; on both sides through New London to Grove Spring; on towpath side from Grove Spring to Higginsville waste-weir; on both sides from waste-weir to Higginsville west road bridge; on towpath side from Higginsville, west road bridge to Durhamville, east road bridge ; on both sides from Durhamville east road bridge, west 100 feet west of new Oneida Lake canal bridge; on towpath side from new Oneida Lake canal bridge at points where deposits had not been taken out the year previous to Peterboro street, Canastota.

Slope walls.

All slope and vertical walls on this section were repaired when found necessary.

Culverts.

The culverts in West Utica, west of lock No. 46, at New London, east of Main street and east of Durhamville near railroad bridge were partially taken up, repaired and placed in good condition at an expense of $202.85. All other culverts on the section excepting Starch Factory creek culvert were thoroughly cleaned out and repaired on both sides of the canal at a cost of $245.

Locks.

Extensive repairs were made to lock No. 46 before the opening of navigation. Two new gates were put in east end of towpath lock, all masonry work pointed up, new running planks placed on gates, all nuts, bolts, chains, etc., repaired and lock-beams neatly painted at an expense of $146.35.

Waste-weirs.

A new bulkhead was placed in Ballou's creek waste-weir, East Utica, wing walls and other masonry work were pointed up where needed at a cost of $155.40; also a new bulkhead at Tefft's waste-weir east of Stanwix, all necessary repairs being made to wing walls and masonry at a cost of $141.70.

Aqueducts.

Before the opening of navigation, on account of the unsafe condition of the Oriskany creek aqueduct, new timbers were placed in the bottom between the old ones. New posts were put on both sides where necessary and in order to further strengthen the sides, new 10x12 fenders were bolted to them and other repairs made at an expense of $136.80.

Bridges.

The following bridges were replanked: No. 14, two roadways; Nos. 22, 24, 29, 32, 34, 34½ (towpath over Rome feeder), No. 37, one roadway; Nos. 39, 45, 51, 52, 55, 59½, O. L. canal towpath bridge over Oriskany feeder, and bridge over State ditch at Tefft's waste-weir, retimbered and planked.

New floor joists, Nos. 4, 9, 24, 32, 34½ (towpath over Rome feeder), Nos. 37, 52, 55. New braces, Nos. 47, 54. Ordinary repairs on Nos. 3, 4, 5, 7, 8, 11, 12, 13, 16, 17, 36, 37, 38, 39, 40, 41, 53, 60, 62. All approaches to bridges were raised and repaired where found necessary. During spring repairs John and Hotel streets lift-bridges were thoroughly repaired; shaftings were taken down, straightened and cleaned; pulleys and gearings newly keyed and tightened up, and the bridges placed in first-class running order at an expense of $156.95. The adjustable coupling placed on John street bridge has proved a good investment, as the raising and lowering of the platform can now be adjusted by one man, while formerly it took three or four.

New Bridges.

During the past season a new swing-bridge was placed at Schuyler street, Utica, west of lock No. 46, and thus far has worked very satisfactorily.

Buildings.

The State shop at Utica was partially clapboarded and the roof repaired. The watch house on Oneida feeder was shingled and otherwise repaired.

Dams.

During the high water in August a portion of the wing wall of the Oriskany dam was carried away; the same was repaired at a cost of twenty-four dollars and seventy-two cents.

Docking.

Three thousand two hundred and eighty lineal feet of new docking were put in on this section during the season.

Weeds.

Weeds were cut on both sides of the canal the entire length of the section during the month of July by employes of the repair boat.

Feeders.

Oriskany, Oneida and Cowassalon feeders were cleaned of eel grass during August.

Repair boats.

Two repair boats and crews have been constantly employed during the season.

Water supply.

There has been no scarcity of water at any time during the season, and an average depth of seven feet has been maintained.

Berme banks.

Six hundred and thirty-nine yards of field stone were used on the berme bank of sections at various places that were washed out by steamboats.

Towpaths.

About 18,500 yards of gravel were placed on the towpath by the repair boats at places where most needed.

State dredge.

From the opening of navigation until about the middle of September the State dredge was constantly employed along the berme bank from Greenfield's road bridge at East Rome, through Rome, to one mile west of Fort Bull. The work done by the dredge has long been needed and is the source of much relief to navigation, especially through the city of Rome, where boats were frequently aground.

Sunken boats.

From causes unknown three boats have sunk during the season on this section. They were promptly raised and taken to dry docks without any interference to navigation.

Navigation.

There were no stoppages or delays of any kind to navigation during the season.

Watching canal.

Good and reliable men have been employed as bank watches, and on account of heavy rains and high water were often obliged to be on duty night and day. Many breaches have been prevented by their timely action.

RECOMMENDATIONS.

Bridges.

I again renew my recommendation of last year that new bridges be built at Gilbert street, East Utica, Higginsville east road and Shellhammer road; also bridge over old Oneida Lake canal near Higginsville, as these bridges are old and in my judgment unsafe.

Aqueducts.

I earnestly recommend that a new trunk be placed in the Oriskany Creek aqueduct as the timbers, posts and sidings are somewhat rotten and would not be safe for another year.

Sauquoit creek.

I respectfully call your attention to the condition of the channel of the Sauquoit Creek. The regular channel is filled up with gravel, stumps, logs, etc., and the water has formed a new one near the berme bank west of the aqueduct. It is undermining and cutting into the bank and in case of high water or the breaking up of ice in the spring is liable to do very serious damage to the canal.

Waste-weirs.

I also renew my recommendation of last year for the rebuilding of the waste-weir east of Higginsville, and when built it should be placed on the towpath side in order to relieve the culvert under the canal, which, in my judgment, is inadequate to carry away the full volume of water that reaches that point. The result is it overflows the berme bank into the canal and is liable at no distant day to cause serious damage.

Feeders.

Extensive repairs will be necessary on the Rome feeder. A new bulkhead should be built and the masonry work pointed up, as it now leaks badly. Many complaints are made by residents along the Oneida feeder on account of the overflow. The banks are old and settled, and in my judgment the feeder should be thoroughly cleaned and the banks raised, especially through the village of Oneida. Were this done it would improve the condition of the feeder, obviate the cause of complaint and be a matter of economy in the way of cutting eel grass, etc., for a number of years.

Slope walls.

I would recommend the taking down and relaying of the slope wall on towpath side from Clay street to swing-bridge at Gilbert street, East Utica, as it is in a very bad condition. This work should be done before the opening of navigation.

Boats.

A new ice-breaker should be built, as one of those we now have is worn out and is no good for further use. Also, the placing of a large gravel scow on this section, as there is but one gravel bed, and that three miles east of Rome. This distance is so far to haul that it is impossible for the repair boats to keep the towpath properly graded and graveled and do the ordinary repairs required on the section.

Dams.

Extensive repairs will be necessary on the State dam in the Oriskany creek before the opening of navigation.

J. W. MANLEY,
Superintendent.

SECTION No. 6, ERIE CANAL — JOHN F. RYAN, *Superintendent.*

ANNUAL REPORT, *showing the name and number of structures or works, the different heads of expenditure, and the total cost of each, on the line of the canal under the charge of John F. Ryan, superintendent of repairs of thirty-three miles of the Erie canal, extending from Canastota to and including Camillus feeder during the* 168 *days ending May* 15, 1892.

STRUCTURES OR WORKS, ETC.	Whole number on section.	Cost of repairs of old, etc.	Total, new and old.
Locks	4	$793 65	$793 65
Lock-tending (exclusive of oil)	....	2,096 42	2,096 42
Aqueducts	4	320 40	320 40
Waste-weirs	5	169 60	169 60
Culverts	15	....	....
Weigh-lock	1	....	....
Farm bridges (wood)	7	....	....
Farm bridge (iron)	1	....	....
Road bridges (wood	14	....	....
Road bridges (iron)	22	281 01	281 01
Towpath bridges (wood)	2	....	....
Towpath bridge (iron)	1	....	....
State scows	2	....	....
Ice-breakers	2	....	....
Lock-houses	4	....	....
Workshops	1	....	....
Watch-houses	2	....	....
Raising and repairing towpath and berme bank (not including repairs to slope walls)	....	478 95	478 95
Dam (feet, 963½)	7	....	....
Docking	....	152 00	152 00
Repairs of breaches	....	19 95	19 95
Breaking ice and assisting boats in consequence of ice	....	148 50	148 50
Watching canal	....	475 55	475 55
Wheelbarrows	22	....	....
Other miscellaneous expenditures	....	411 17	411 17
Other work of consequence which does not come under any of the above heads, viz.:			
Publishing and filing abstracts	....	12 38	12 38
Superintendent's salary	....	....	937 50
Total	....	....	$6,297 08

JOHN F. RYAN,
Superintendent.

SECTION No. 6, ERIE CANAL — EDWIN LODDER, *Superintendent.*

ANNUAL REPORT, *showing the name and number of structures or works, the different heads of expenditure, and the total cost of each, on the line of the canal under the charge of Edwin Lodder, superintendent of repairs of thirty-three miles of the Erie canal, extending from Canastota to and including the Camillus feeder during the ninety-two days ending September* 30, 1892.

STRUCTURES OR WORKS, ETC.	Whole number on section.	Total cost, new and old.
Locks	4	$291 40
Lock-tending (exclusive of oil)	....	2,910 00
Aqueducts	4	....
Waste-weirs	5	....
Culverts	15	48 00
Weigh-locks	1	....
Farm bridges (wood)	7	582 30
Farm bridges (iron)	1	
Road bridges (wood)	14	
Road bridges (iron)	22	
Towpath bridges (wood)	2	
Towpath bridges (iron)	1	
State scows	2	....
Ice-breakers	2	....
Lock-houses	4	....
Workshops	1	....
Watch-houses	2	....
Raising and repairing towpath and berme bank, (not including repairs to slope walls)	....	561 08
Dams (963½ feet)	7	....
Slope wall	....	161 01
Docking	....	
Repairs of breaches	....	77 52
Watching canal	....	720 00
Other work of consequence which does not come under any of the above heads, viz.:		
Cutting grass and weeds	....	284 59
Piling and unloading timber	....	77 55
Assisting sunken boats and raising State scows	....	253 46
Recording abstracts	....	1 50
Printing abstracts	....	14 52
Superintendent's salary	....	375 00
Total	....	$6,357 93

Bridges.

Main Street bridge, Canastota, Beebe's road bridge and Herrick's farm bridge, need replanking.

New Boston road bridge should have new coping and some new joists and be replanked.

Canaserago road bridge needs new joists and planking.

Chittenango road bridge wants new coping, joists and planking.

Bolivar road bridge, needs new guard-rail on both sides of approaches and replanking.

White's road bridge wants replanking and new joists.

Pool's brook bridge needs new needle-beams and one new chord on the west side.

Manlius Centre road bridge is in a very bad condition, and should be rebuilt as soon as possible.

Stern's farm bridge is also in bad shape and should be rebuilt at once.

Burdick's road bridge needs replanking.

Thompsons Landing road bridge needs new guard-rail and joists.

Catherine street bridge should have new joists and planking.

Orange street bridge needs replanking.

Grape street bridge should have new sidewalks on the west side; otherwise it is in good shape.

The two towpath bridges over the Oswego canal at the junction needs new joists and planking.

Warren street bridge should be replanked by spring.

Salina street swing-bridge sidewalk needs new joists and planking.

Clinton street bridge roadways need replanking and repairing, and a new sidewalk should be built on the east side.

West street lift-bridge needs new cable wheels with feather keys instead of set screws, and I would recommend that this bridge be thoroughly overhauled before another season.

Geddes street bridge needs new coping and face plank.

Genesee street bridge needs new planking and some new joists.

Bridge street bridge wants new coping and face plank.

Geeres Landing road bridge needs new planking and new southeast center brace.

Belle Isle road bridge wants new coping and face plank.

Culverts.

The culverts are in good condition with the exception of the one between Belle Isle road bridge and Geere's farm bridge; the foundation planks are gone and the north end of the masonry should be repaired.

Aqueducts, etc.

Nine-mile creek feeder dam and bulkhead, the south wing wall should be rebuilt before next season, as it is in bad condition.

The bulkhead should be rebuilt, the apron replanked, and new docking put in on the berme side, about thirty feet on each end.

Limestone feeder aqueduct leaks on the southwest side and the west abutment should be pointed.

Chittenango feeder dam and bulkhead need repairing, and should have the bulkhead and dam rebuilt and the channel cleaned.

Locks.

There will have to be new lower gates on towpath side of lock No. 47, and new gates for lock No. 49 on the lower side; the latter are on hand, one pair finished and ready to place in position, and the other pair are now being built.

There should be a new miter-sill placed in lock No. 48 on towpath side.

Lock No. 50 needs two pairs of gates on upper end and gates for lower end on the berme side.

Stop-gate.

The stop-gate is in good condition and will need no repairing this season.

Docking.

The docking on this section is in bad condition and there should be about 8,000 lineal feet relaid.

Walls.

There should be about seventy feet of vertical wall repaired at the foot of lock No. 47, on the berme side; last year the wall was relaid over the water line, but the foundation was poor and now it is bulged out and is the cause of much trouble to boats entering the double lock. I would recommend that this be taken down and relaid before navigation is resumed, as it is liable to fall in the canal at any moment and render the double lock useless for some time.

Water.

There has been plenty of water on the levels.

Banks.

The banks have been strengthened where needed the most, but would suggest that another scow be placed on the section next year, as there is too much work for one scow and crew; heretofore two scows were in operation, and since the other boat was removed the docking had to be neglected in order to keep the towing path in repair and a good deal of work remains to be done next season.

Scows.

The scow in use now is in very bad shape and should be replaced with a new one when navigation is resumed next season.

The boat is not tenantable, as the roof leaks and the timber is almost gone. We have tried hard to repair it and keep it from leaking, but without success, as the woodwork is too rotten to hold the oakum.

EDWIN LODDER,
Superintendent.

SECTION No. 7, ERIE CANAL — JOSIAH H. HAMILTON, *Supt.*

ANNUAL REPORT, *showing the name and number of structures or works, the different heads of expenditure, and the reported cost of each, on the line of the canals under the charge of Josiah H. Hamilton, superintendent of repairs of thirty-one miles of the Erie canal, extending from the west bank of Camillus feeder to Wayne county east line during the* 366 *days ending September* 30, 1892.

STRUCTURES OR WORKS, ETC.	Whole number on section.	Cost of repairs of old, etc.
Locks	4	$259 30
Lock tending (exclusive of oil)		3,583 36
Lock-gates	20	
Aqueducts	5	317 70
Waste-weirs	3	15 59
Culverts	21	
Farm bridges (wood)	3	394 31
Farm foot-bridge (iron)	1	
Road bridges (wood)	10	
Road bridges (iron)	12	
Towpath bridges (wood)	2	
State scows	1	
Small boats	1	
Ice-breakers	1	
Lock-houses	2	
Workshops	1	
Watch-houses	2	
Raising and repairing towpath and berme bank (not including repairs to slope walls)		636 80
Dams (feet, 257)	4	
Docking and repairing docking		324 61
Breaking ice and assisting boats in consequence of ice		24 72
Watching canal		900 82
Other miscellaneous expenditures		
Other work of consequence which does not come under any of the above heads, viz:		
Tending feeders		322 50
Publishing abstracts		26 19
Filing abstracts		2 25
Assisting sunken boats		383 75
Cutting weeds and eel grass		297 41
Burying mules and horses		14 80
Repairing breaches		204 19
Handling lumber		139 14
Painting		24 41
Cook on scow		105 00
Superintendent's salary		1,500 00
Total		$9,478 85

Locks.

Needed repairs were made to locks in the process of the spring work on section.

Bridges.

Bridges Nos. 117, 122, 126, 127, 145, and Putnam feeder bridge have been replanked; other bridges on section have been repaired, and new plank has been laid on the Port Byron and Centerport aqueduct roadway bridges.

Slope walls.

About 680 feet of slope wall has been raised on the berme side of canal at Jordan swamp and Port Byron.

Feeder.

The feeder at Port Byron has been cleared of eel grass.

Dams

Have received all necessary repairs.

Breaches.

A break occurred on berme side at May's Point; one on towpath side at cement works, east of Jordan, and one in culvert at Weedsport, causing a detention of forty-eight hours.

Weeds.

Weeds have been cut on both sides of the canal during the season.

Sluices.

All the sluices on section have been repaired, and snubbing posts were reset wherever necessary.

Sunken boats.

There have been four sunken boats on section; one at Memphis, sunk by collision with a steamboat, November sixth; the next was sunken on November twenty-eighth; the third was at Montezuma, and the last case occurred at Port Byron and was caused by some act of carelessness.

Docking.

Docks have been repaired at Memphis, Peru, Jordan, Weedsport, Port Byron, Montezuma, and under bridges affording but a narrow towpath.

Bars.

Bars were taken out at the following places: Memphis, Jordan, Paddock's brook, lock No. 51, Putnam's feeder, Weedsport, Centerport, lock No. 52, Port Byron and Montezuma.

Scows.

The State scow City of Syracuse has been exchanged for a new one.

Water.

There has been a plentiful supply of water during the entire season.

Conduits.

The water main leading from Port Byron feeder to the canal leaks badly and will be repaired as soon as possible.

Works necessary to be repaired, etc.

Lock No. 51 needs two, and lock No. 52 three new balance-beams.

The bulkhead at Carpenter's feeder is in need of being rebuilt.

Bridges Nos. 115, 117, 123 and 124 will have to be rebuilt, and a new foundation should be laid at bridge No. 137.

Three spans of Richmond aqueduct should be rebuilt.

A new bulkhead should be inserted at Weedsport waste-weir.

There are some bad leaks through the stone work of Centerport, Port Byron and Crane brook aqueducts; the earth should be removed and the masonry pointed on the inside.

A troublesome sink-hole exists at each end of lock No. 52, on the towpath side; it requires early attention in order to keep the lock in proper condition.

JOSIAH H. HAMILTON,
Superintendent.

Dated WEEDSPORT, *October* 8, 1892.

SECTION No. 1, OSWEGO CANAL — THOMAS O'BRIEN, *Supt.*

ANNUAL REPORT, *showing the name and number of structures or works, the different heads of expenditure and the total cost of each, on the line of the canal under the charge of Thomas O'Brien, superintendent of repairs of about thirty-three miles of the Oswego canal, extending from Syracuse to Three-River Point, including Baldwinsville canal and Seneca river towing path, during the year ending September* 30, 1892.

STRUCTURES OR WORKS, ETC.	Whole number on section.	Cost of new structures.	Cost of repairs of old, etc.	Total new and old.
Locks	6		$819 39	$819 39
Lock-tending (exclusive of oil)				2,205 00
Lock-gates	30	$649 15		649 15
Culverts and sluices	10		59 39	59 39
Float bridges (wood)	1			
Road bridges (wood)	6			
do (iron)	14		426 05	426 05
Tow-path bridges (wood)	2			
do do (iron)	2			
State scows	1			
Small boats	1			
Ice-breakers	1			
Under-water excavators	1			
Lock-houses	5			
Timber-sheds	1			
Raising and repairing towpath and berme bank (not including repairs to slope walls)				1,644 14
Cleaning out bottom of canal during spring repairs				1,240 30
Cleaning on Sand creek	5			
Dams (feet, 300)	4			
Docking			590 32	590 32
Repairs of breaches				51 40
Watching canal				150 00
Wheelbarrows	120		9 00	9 00
Superintendent's salary				1,200 00
Other work of consequence, which does not come under any of the above heads, viz.:				
Cutting weeds and bushes				271 94
Piling lumber				36 60
Assisting boat				5 27
Publishing abstracts				44 59
Commissioners of deed's fees				5 50
Clerk's fees filing abstracts				1 50
Total				$9,409 54

Bridges.

The following bridges have been repaired: Baldwinsville canal bridge and Culbert bridge, Green Point bridge, Cold Springs bridge and Willow Street bridge in Syracuse.

Lock and lock-gates.

Lock No. 1 was thoroughly repaired during the spring and a new lower towpath gate put in.

Lock No. 2. A new bridge was put on this lock and one new lower towpath gate put in.

Locks No. 3, 4 and 5 were thoroughly repaired during the spring of 1892. Baldwinsville guard-lock has been overhauled and two new guard gates put in place.

The two new lower gates for lock No. 5 have been finished and are ready for use.

Two new gates have been built for and placed in Baldwinsville guard-lock. One new lower towpath gate has been built and placed in lock No. 2.

Docking.

New docking has been laid on Syracuse level and short level. In all 2,362 lineal feet of docking has been laid and 5,000 feet of ties used.

Sluices.

The sluices on Seneca river level have been kept in good repair. At least five sluices on this level should be rebuilt next season.

Towing path.

An unusual amount of repairing has been done during the last season on the towpath, both on the canal and river levels. The berme bank has been strengthened at different points on the Liverpool level. The towpath is now in excellent condition.

Bottoming.

During the spring the Syracuse and the north side-cut levels were bottomed out.

Breaches.

A breach occurred during the fall of 1891 in the berme bank of the Baldwinsville side-cut. It was discovered in time, promptly repaired and serious damage avoided.

Navigation.

Navigation has not been interrupted during the entire season.

A depth of seven feet of water has been maintained since navigation opened.

RECOMMENDATIONS.

The coming season one new lower heelpath gate will be required for lock No. 2 and one new lower heelpath gate for lock No. 3.

About 3,000 lineal feet of docking and 6,000 feet of ties will be required for next season.

The Baldwinsville dam is in a bad and dangerous condition. I most respectfully report that this dam should be entirely rebuilt at once.

Near the berme bank of the Liverpool level in the vicinity of the Gale high banks are several bars which should be dredged before navigation opens next season. There are also some bars at Red Rock in Seneca river, and at least one large bar near the Baldwinsville lock which should be removed.

The following bridges should be newly replanked and otherwise repaired the coming season; the canal bridge and State ditch bridge at Mud Lock, South Side cut bridge, Park street bridge, and Third North street bridge in Syracuse.

Fifty thousand feet of Georgia pine plank will be required to repair bridges the following season.

THOMAS O'BRIEN,
Superintendent.

SECTION 2, OSWEGO CANAL — A. SALLADIN, JR., *Supt.*

ANNUAL REPORT *showing the name and number of structures or works, the different heads of expenditure, and the cost of each, on the line of the canal under the charge of A. Salladin, Jr., superintendent of repairs of twenty-three miles of the Oswego canal, extending from Oswego to Three-River Point, also the Oneida river improvement, twenty miles, during the fiscal year ending September* 30, 1892.

STRUCTURES OR WORKS, ETC.	Whole number on section.	Cost of new structures.	Cost of repairs of old, etc.	Total, new and old.
Locks	21		$109 03	$109 03
Lock-tending (exclusive of oil)			6,559 83	6,559 83
Lock-gates	100	$837 24	873 98	1,711 22
Aqueducts	1			
Waste-weirs	8	216 91		216 91
Culverts	4			
Road bridges (wood)	6		640 25	640 25
Road bridges (iron)	5			
Towpath bridges (wood)	5			
Towpath bridges (iron)	1			
State scows	2		7 50	7 50
Small boats	1			
Lock-houses	17	14 82	38 82	53 64
Workshops	1		28 50	28 50
Timber sheds	1			
Raising and repairing towpath and berme bank (not including repairs to slope walls)			1,399 88	1,399 88
Dams (bulkheads, bracketing and repairs)	7		2,200 40	2,200 40
Slope wall			44 42	44 42
Docking			118 88	118 88
Watching canal			270 00	270 00
Other work of consequence which does not come under any of the above heads, viz.:				
Publishing abstract			56 00	56 00
Cutting brush			116 60	116 60
Unloading and piling timber			62 89	62 89
Moving sunken boat			3 00	3 00
Retaining walls			248 50	248 50
Superintendent's salary				1,500 00
Total				$15,347 45

Locks and gates.

New gates have been made and placed in the following locks: Two gates each in locks Nos. 7, 14, 16, 17 and guard-lock No. 4; two lower gates are made at the State shop for lock No. 16; two new balance-beams have been made for gates for lock No. 11, and one each for locks Nos. 7, 12, 16 and 17. Part of coping on berme side of lock No. 7 was taken up and relaid.

Bridges.

Bridges Nos. 14, 22 and 30 have been partially and Nos. 16 and 29 entirely replanked.

New needle-beams have been placed in Nos. 15 and 19; joists in Nos. 16 and 29, and saddles in No. 15.

A sidewalk should be built on bridge No. 15 and also one on South Fulton road bridge No. 20.

Lock-houses.

A new lock-house has been built for lock No. 14 and extensive repairs have been made to house on lock No. 15.

A new house should be built on lock No. 12.

Towpath and berme bank.

About three miles of towpath on levels 12, 13, 14, 15 and 16 has been repaired with ashes; also repairs have been made on level No. 17 by grading, ditching and building sluices.

Also new sluices and general repairs were made at different points on section where necessary.

Docking.

About 30,000 feet B. M. hemlock docking has been laid this season. An equal amount will be necessary next year to put the section in good condition in this respect.

Dams.

Bulkheads have been built at the west end of high dam, three sections, and at the west end of Fulton dam, two sections.

Last winter about two hundred and fifty lineal feet of the apron of Battle Island dam was washed out; this should be rebuilt as soon as possible to avoid further damage. I would also respectfully renew my recommendation made last year, that a new sloping apron be built at Oswego dam.

Waste-weirs.

Waste-weirs on level No. 8 have been entirely rebuilt.

Vertical wall.

About three hundred lineal feet of the vertical wall on level No. 17, above new bench wall, has been taken down and relaid.

Workshop.

The workshop has been shingled and otherwise repaired, and it is now in good condition.

Navigation.

The required depth of water has been maintained by bracketing the dams during the times of low water.

A. SALLADIN, JR.,
Superintendent of Repairs.

OSWEGO, N. Y., *October* 11, 1892.

SECTION No. 1, BLACK RIVER CANAL — G. C. WARD, *Supt.*

ANNUAL REPORT *showing the name and number of structures or works, the different heads of expenditure, and the total cost of each, on the lines of the canal under the charge of G. C. Ward, superintendent of repairs of thirty-seven and one-half miles of the Black River canal, extending from Rome, N. Y., to two miles above Forest Port, during the* 366 *days ending September* 30, 1892.

STRUCTURES OR WORKS, ETC.	Whole number on section.	Cost of new structures.	Cost of repairs of old, etc.	Total, new and old.
Locks	73	....	$2,647 44	$2,647 44
Lock-tending (exclusive of oil)	.....	....	8,332 70	8,332 70
Lock-gates	276	$2,179 25	1,427 50	3,606 75
Aqueducts	6	....	102 00	102 00
Waste-weirs	9	....	....	....
Culverts	12	....	417 52	417 52
Sluices	......	....	1,035 40	1,035 40
Farm bridges (wood)	18	....	1,399 40	1,399 40
Road bridges (wood)	23	....		
Road bridges (iron)	8	....		
Towpath bridges (iron)	1	....		
State scows	1	....	....	....
Small boats	2	....	....	....
Lock-houses	23	48 40	117 60	166 00
Workshops	2	....	....	....
Watch-houses	1	....	....	....
Piling machines	1	....	....	....
Raising and repairing towpath and berme bank (not including repairs to slope walls)	......	....	234 65	234 65
Cleaning out bottom of canal during spring repairs	......	....	3,125 00	3,125 00
Dams (feet)	......	....	524 95	524 95
Docking	......	....	82 00	82 00
Repairs of breaches	......	....	288 44	288 44
Breaking ice and assisting boats in consequence of ice	......	....	34 10	34 10
Watching canal	......	....	1,316 64	1,316 64
Raising sunken boat	......	....	62 40	62 40
Cutting brush	......	....	175 20	175 20
Miter-sills	......	....	140 00	140 00
Other work of consequence which does not come under any of the above heads, viz.:				
Team work	......	....	98 00	98 00
Reservoirs	......	....	1,319 00	1,319 00
Removing bars	......	....	317 94	317 94
Running water	......	....	18 00	18 00
Boating lumber	......	....	208 29	208 29
Publishing abstracts	......	....	87 75	87 75
Superintendent's salary	......	....	1,500 00	1,500 00
Total	......	....	....	$27,239 57

Locks.

Necessary repairs were made on all locks prior to opening of navigation. Locks Nos. 12, 35, 70 and 71 were pointed with cement to prevent leakage. The sides of locks Nos. 28, 40, 43 and 49 were chipped off, the walls having settled during winter. Lock bottoms in Nos. 14, 15, 17, 20, 35, 36, 45, 46, 47, 61 and 62 were replanked and have caused no trouble during season. The sides of locks Nos. 18 and 39 were dressed off in June and have caused no trouble since. Sluices have been repaired around several locks by new docking, aprons, walls, etc.

Lock-gates.

Wherever practicable old gates have been repaired by new balance-beams, bunting-plank, etc. All locks were numbered at opening of navigation. New gates have been inserted as follows: One each at locks 2, 4, 9, 11, 16, 32, 61, 67 and 70, and two each at locks 5, 10, 15, 22 and 38.

Aqueducts.

Mohawk aqueduct below lock No. 9 was rebuilt prior to opening of navigation. Lansing Kiln aqueduct was repaired with new timber and plank and at present all aqueducts are in good condition.

Waste-weirs.

New gates were put in at Forestport waste-weir before opening of navigation; the walls of this waste-weir are somewhat shaky and will need to be relaid next spring. Other waste-weirs on the section are in good condition.

Culverts.

The culvert near lock No. 21 was cleaned out last fall, as were also Hall culvert and creek channel near lock 29. Hall culvert is again filled and will be necessarily cleaned this fall; it causes much trouble and something should be done to stop it from filling up so easily; either the mill dam below must be taken away, or the creek channel above provided with a series of catch basins to receive the slats and floatwood that is forced down in time of high water.

Lock-houses.

All lock-houses on this section have received the necessary repairs. One new house was built at lock No. 14; a new lock-house is needed at lock No. 30, for which the material has been delivered.

Bridges.

A new bridge has been built over guard-lock at Forestport. Five farm bridges on section will need to be rebuilt the coming year, and the bridges in town of Western should be repainted. All bridges have received proper attention as to abutments, plank, etc., and the approaches to many have been raised so that at present all are in good condition.

State scow.

The State scow is in a very dilapidated condition. Early in September it was found necessary to replace the stern by a new one, so that it could be made to last the season, but it must certainly be replaced by a new scow before opening of navigation next year.

Cleaning prism.

The prism of the canal was cleaned during spring repairs by taking out bars that had washed in during winter, but there was not money enough to do any bottoming to original bottom; it is very necessary that this should be done, especially at Forestport feeder.

Docking.

About 500 lineal feet of docking was built in Forestport feeder, near Forestport, to prevent sand from sliding in. Also, docking has been built at foot of several locks, and much more is needed for next spring.

Sunken boat.

The boat Joseph Ano sank in Forestport feeder on August nineteenth. The boat was old and worn out and was therefore abandoned. It was unloaded by State crew and hauled out of way as speedily as possible, with very little delay to navigation.

Breaches.

On July thirteenth a break occurred in towing path near Hicks' mill, about four miles from Rome. About fifty feet of bank and six to ten feet below canal bottom went out, caused by the wearing out of an old raceway under the canal, to conduct the waste water from the mill. The break was repaired as speedily as possible and only delayed navigation for four days.

Miscellaneous.

Section No. 2 has been furnished with eight lock-gates with arms, and four balance-beams.

Navigation.

The required depth of water has been maintained during season of navigation.

Reservoir and water supply.

Water was started from North lake June thirtieth, but on account of continuous rains it was run for only a short time and then shut off until the latter part of August. Since that time water has been run almost continuously. The Woodhull and Sand lake reservoirs are at present full of water and will not need to be drawn from during the remainder of the season.

RECOMMENDATIONS.

I respectfully renew my recommendation of last year in regard to North lake dam. The earth embankment should be raised from one and one-half to two feet the entire length of dam, which would make it in a safe condition; also, locks 3, 18, 35, 37 and 55 should be rebuilt. I would also recommend the use of a greater amount of money in bottoming out prism and replanking bottoms of locks, and a special appropriation for bottoming Forestport feeder to original bottom, as this feeder is one of the principal feeders to the Erie, and it is very necessary that it should be kept in proper condition.

G. C. WARD,
Superintendent of Repairs.

SECTION No. 2, BLACK RIVER CANAL — THOMAS NORTON, *Superintendent.*

ANNUAL REPORT *showing the name and number of structures or works, the different heads of expenditure, and the reported cost of each, on the line of the canal under the charge of Thomas Norton, superintendent of repairs of fifty-three and one-half miles of the Black River canal, extending from Boonville to Carthage, during the* 153 *days ending September* 30, 1892.

STRUCTURES OR WORKS, ETC.	Whole number on section.	Cost of repairs of old, etc.	Total, new and old.
Locks	40	....	....
Lock-tending (exclusive of oil)	....	$2,540 00	$2,540 00
Oil for locks	......	550 00	550 00
Lock-gates	130	....	....
Aqueducts	1	....	....
Waste-weirs	2	....	....
Culverts	7	....	....
Farm bridges (wood)	18	....	....
Road bridges (wood)	7	....	....
Road bridges (iron)	7	....	....
Towpath bridges (wood)	1	....	....
State scows	1	....	....
Small boats	2	....	....
Steam dredge	1	....	....
Lock-houses	13	....	....
Bridge-houses	3	....	....
Raising and repairing towpath and berme bank (including repairs to slope walls)	....	2,415 03	2 415 03
Other work of consequence, which does not come under any of the above heads, viz.:			
Dredge force	....	728 80	728 80
Publishing abstracts	....	22 50	22 50
Notary's fees	....	5 00	5 00
Tending dam at Stillwater	....	150 00	150 00
Superintendent's salary	....	500 00	500 00
Total	....	$6,911 33	$6,911 33

Locks.

All locks are at present in good condition, with but two exceptions, Nos. 75 and 76. Since May first, eight old lock-gates have been taken out and replaced by new ones, as follows: One each in locks Nos. 72, 85, 88, 95, 96 and 97; and two gates in lock No. 87. The number of new gates on hand May first, was two, and the superintendent of section No. 1 has furnished me this season with eight new gates, thus leaving two new gates on hand at the close of the fiscal year; these two will be used during the coming fall.

Aqueducts.

The aqueduct at Sugar river is in a good state of repair.

Bridges.

The bridges on this section are not in first-class condition, as many of them need replanking.

The sidewalk of the approach to Boonville bridge, below lock No. 71, has been relaid and a new railing at the same time erected to complete the approach.

The first bridge below lock No. 91 has had a new abutment, a new approach, new floor timbers, and has been replanked besides.

The "D. Jones" bridge below lock No. 91 has been repaired in a similar manner to bridge No. 91.

The towpath bridge at Lyons Falls has been replanked and supplied with new floor timbers.

Lyons Falls bridge, between locks Nos. 105 and 106, has had new timbers under end and new floor timbers under sidewalk, and has been replanked where necessary.

Beach's bridge and Castorland bridge have been replanked where necessary.

Miscellaneous.

The dredge force have been employed since June first, removing bars, cleaning out locks at river, and dredging the river where necessary. There has been no delay worth mentioning on this section; two boats were sunken, but they were at once attended to and occasioned no hindrance.

Navigation has been good during the season.

There has been sufficient water in both canal and river, and a depth of four feet of water has been maintained over each miter-sill during the season of navigation.

RECOMMENDATIONS.

I would respectfully recommend the following improvements to be made for the coming season:

A new swing-bridge at Whittlesy's; the present structure has been condemned by the town commissioners as unsafe.

A new swing-bridge at Illingworth, or let the old one be extensively repaired.

At Castorland two spans of the bridge there were burned last spring, and in their place temporary structures were erected, which will without doubt be carried away by the spring freshet or the contact of floating ice. They should be replaced by permanent structures before the ice goes out in the spring.

The bridge at Carthage should be rebuilt or should undergo repairs wholly.

The dock at the head of locks should be repaired at once for temporary service, and will need to be rebuilt before the opening of navigation.

Lock-houses should be repaired and painted.

Otter creek lock is in need of much repair; lock No. 76 will have to be rebuilt before next season.

All bridges on section need painting, and the following bridges need replanking: River bridge at Lyons Falls; bridge at lock No. 75; the swing-bridge at Castorland; and the river bridge at Carthage.

A new sluice is needed at combined locks Nos. 87, 88, 89 and 90.

THOS. NORTON,
Superintendent.

PORT LEYDEN, N. Y., *September* 30, 1892.

SECTION No. 2, BLACK RIVER CANAL—J. T. CAMPBELL, *Superintendent.*

ANNUAL REPORT *showing the name and number of structures or works, the different heads of expenditures and the estimate cost of each, on the line of the canal under the charge of J. T. Campbell, superintendent of repairs of fifty-three and one-half miles of the Black River canal, extending from Boonville to Carthage, during the* 213 *days ending April* 31, 1892.

STRUCTURES OR WORKS, ETC.	Whole number on section.	Cost of repairs of old, etc.	Total, new and old.
Locks	40	$327 50	$327 50
Lock-tending (exclusive of oil)	......	976 00	976 00
Oil for locks	......	260 00	260 00
Lock-gates	130	127 25	127 25
Aqueducts	1	....	....
Waste-weirs	2	....	....
Culverts	7	....	....
Farm bridges (wood)	18	....	....
Road bridges (wood)	7	....	....
Road bridges (iron)	7	....	....
Towpath bridges (wood)	1	....	....
State scows	1	15 00	15 00
Small boats	1	....	....
Lock-houses	13	18 00	18 00
Bridge-houses	3	....	....
Cleaning out bottom of canal during spring repairs	......	816 61	816 61
Dredge force	......	365 45	365 45
Docking	......	122 50	122 50
Tiling sink holes	......	42 00	42 00
Tending dam, old forge	......	40 00	40 00
Other miscellaneous expenditures	......	256 50	256 50
Other work of consequence which does not come under any of the above heads, viz.:			
State scow force, miscellaneous repairs on section (October, November and December)	......	1,002 00	1,002 00
Tending dam at Stillwater, four months (December, January, February and March)	......	120 00	120 00
Printing abstracts	......	21 00	21 00
Notaries' fees	......	5 00	5 00
Superintendent's salary	......	700 00	700 00
Total	......	$5,214 81	$5,214 81

J. T. CAMPBELL,
Superintendent.

Dated LOWVILLE, *October* 17, 1892.

CAYUGA AND SENECA CANAL—JOHN McKEON, *Superintendent.*

REPORT *showing the name and number of structures or works, the different heads of expenditure, and the total cost of each, on the line of the canal under the charge of John McKeon, superintendent of repairs of twenty-two miles of the Cayuga and Seneca canal, extending from Montezuma to Geneva, from October* 1, 1891, *to April* 1, 1892.

STRUCTURES OR WORKS, ETC.	Whole number on section.	Cost of new structures.	Cost of repairs of old, etc.	Total, new and old.
Locks	11	....	$242 00	$242 00
Lock-tending (exclusive of oil)	......	$872 00	....	872 00
Lock-gates	44	457 55	....	457 55
Waste-weirs	1	....	....	....
Culverts	9	....	....	....
Farm bridges (wood)	1	....	....	....
Road bridges (wood)	5	....	448 56	448 56
Road bridges (iron)	11	....	....	....
Towpath bridges (wood)	26	....	....	....
State scows	1	....	....	....
Lock-houses	8	....	....	....
Workshops	1	....	....	....
Watch-houses	8	....	....	....
Raising and repairing towpath and berme bank (not including repairs to slope walls)	......	....	281 59	281 59
Dams	5	....	....	....
Docking and dams	......	....	302 05	302 05
Watching canal	......	....	76 00	76 00
Superintendent's salary	.....	....	....	620 00
Total	......	....	....	$3,299 75

JOHN McKEON,
Superintendent.

CAYUGA AND SENECA CANAL—JOHN VAN RIPER, *Superintendent of Repairs.*

ANNUAL REPORT *showing the name and number of structures or works, the different heads of expenditure, and the total cost of each, on the line of the canal under the charge of John Van Riper, superintendent of repairs of twenty-three miles of the Cayuga and Seneca canal, extending from Montezuma to Geneva, with spur from Mud lock to Cayuga, from April* 6, 1892, *to September* 30, 1892.

STRUCTURES OR WORKS, ETC.	Whole number on section.	Cost of new structures.	Cost of repairs of old, etc.	Total, new and old.
Locks	11	....	$650 10	$650 10
Lock-tending (exclusive of oil)	12	....	2,000 00	2,000 00
Lock-gates	44	$227 00	....	227 00
Waste-weirs	1	....	....	....
Culverts	9	....	41 00	41 00
Road bridges (wood)	5	....	408 60	408 60
Road bridges (iron)	11	....		
Towpath bridges (wood)	26	....		
State scows	1	....	74 00	74 00
Small boats	1	....	....	....
Lock-houses	8	....	....	....
Workshops	1	....	....	....
Watch-houses	8	....	....	....
Raising and repairing towpath and berme bank (not including repairs to slope walls)	......	....	699 25	699 25
Dams	5	....	149 00	149 00
Docking	......	....	496 35	496 35
Repairs of breaches	......	....	3 60	3 60
Watching canal	1	....	175 00	175 00
Other work of consequence, which does not come under any of the above heads, viz.:				
Cutting weeds and bushes along towpath	......	....	113 25	113 25
Repairing Montezuma feeder	......	....	56 95	56 95
Boating timber and piling lumber	......	....	83 00	83 00
Publishing reports	......	....	20 00	20 00
Assisting boats in low water	......	....	15 00	15 00
Superintendent's salary	......	....	580 00	580 00
Total	......	$227 00	$5,565 10	$5,792 10

The Cayuga and Seneca canal extends from the Erie canal at Montezuma to Geneva, at the foot of Seneca lake, with a branch from Mud lock to Cayuga, at the foot of Cayuga lake, thus giving the people of Watkins, at the head of Seneca lake, and of Ithaca at the head of Cayuga lake, a water way, by the Cayuga and Seneca and Erie canals, to Albany and New York.

The structures are eleven composite lift-locks, one side-lock at Seneca Falls, nine culverts, a feeder at Montezuma, one pier at the foot of Cayuga lake, one pier and breakwater at the foot of Seneca lake, eleven iron bridges, five wooden bridges for roadways, twenty-six wooden towpath bridges, five dams and one farm bridge.

The total expenditures for labor on this canal during my term of office, from April 6, 1892, to October 1, 1892, were $5,787.85. The structures are in passable condition, but the docking at Geneva will need a large amount of repairs next spring, and the Soap Mine bridge near Geneva, the towpath bridge opposite the State shop at Seneca Falls, and the bridge across the outlet at Cayuga, are in need of new planking their entire length. New lock-gates (one pair each), will be required before navigation opens next spring at lock No. 10 at Montezuma and at lock No. 11 at Cayuga. There has been no delay or obstruction on this canal since navigation opened except a few boats dragging on bars which should be dredged out.

JOHN VAN RIPER,
Superintendent of Repairs.

WATERLOO, N. Y., *October* 10, 1892.

WESTERN DIVISION.

Office of Assistant Superintendent of Public Works,
Western Division, Rochester, *December* 1, 1892.

Hon. Edward Hannan, *Superintendent of Public Works:*

Sir.— I respectfully present to you, as follows, my annual report for the western division of the Erie canal for the fiscal year ending September 30, 1892.

The division consists of four repair sections of the Erie canal, Nos. 8 to 11, inclusive, divided as follows:

Number of section.	Commences.	Ends.	Distance in miles.
8	East line of Wayne county	East line of Monroe county	35.924
9	East line of Monroe county	End of construction section 284	39.624
10	End of construction section 284	Sulphur Springs guard-lock	46.560
11	Sulphur Springs guard-lock	Buffalo, including Hamburgh canal	26.815
Total			148.923
There are also five navigable slips in the city of Buffalo, aggregating in length			1.600
And Genesee river feeder and terminal slip of Genesee Valley canal, Rochester			2.500
In all			153.023

The unnavigable feeders are :

	Miles.
Tonawanda and Oak Orchard creek	11.55
Genesee Valley canal, from Cuba reservoir to old lock No. 87,	7.65
Genesee Valley canal, from Scottsville to Rochester	11.20
Total	30.40

The canal is fed as follows:

1. Lake Erie at Buffalo.
2. Tonawanda creek at Tonawanda.
3. Tonawanda and Oak Orchard creeks at Medina.
4. Allen's creek, through the old Genesee Valley canal, at Rochester.
5. Genesee river feeder in the city of Rochester.

Lake Erie is, however, the main supply, the others being contributory in varying proportions.

Navigation.

During October and November, 1891, the opening months of the fiscal year, navigation was seriously deranged by low water in Lake Erie, as it had been during the preceding months described in my last year's report. For days at a time during that season, canal navigation was practically closed between Commercial street in Buffalo and Black Rock, so that loaded boats had to be towed from Buffalo by way of Niagara river to Tonawanda, and there locked back to the Erie canal at serious extra expense to boatmen for towing. In view of these facts the Legislature last winter appropriated $20,000 for deepening the canal between Ferry and Commercial streets in Buffalo. This amount, although it may help navigation, if judiciously applied, is too small to secure it against conditions like those of last year. To preserve a navigable depth of water between the points named through all fluctuations of the lake, about two miles of rock bottom must be excavated at a cost, in my judgment, of about $60,000 more than the appropriation of last winter.

A large quantity of stone that had long formed an obstruction to the water flow and a menace to navigation in the rock cut between Lockport locks and the Sulphur Springs guard-lock was removed last spring.

Eel grass was unusually troublesome on the division this season; a tug and grass drag were employed tearing out this pest of navigation on parts of sections 8, 9, and 10 for nearly three months. The twelve and seventeen-mile levels needed special care in order to keep the water flow on those levels up to navigable height.

There was no actual stoppage of navigation from any cause on the western division during the year.

Locks.

There are twenty-three locks on the western division; nine on section 8, of which six have been lengthened; five on section 9, all lengthened; five combined locks and Sulphur Springs guard-lock on section 10; the river lock at Tonawanda and guard-lock and ship-lock at Black Rock on section 11.

On section 8 new gates were put in locks 57 and 59, and on section 10 eight new gates were put in the combined locks. Throughout the division balance-beams, paddles, foundations, cribs, grouting, pointing, etc., were renewed as occasion required, and the locks escaped accident and were kept in good working order.

Bridges.

There are on the division 224 bridges, 114 of cast iron, fifty-two wrought iron, twenty-two wood and iron and thirty-six wood; of these ten are lift and four are swing bridges.

Section 8, bridge No. 43, wood, was rebuilt and the towpath abutment taken down and relaid; Clyde lift-bridge and other bridges of the section were refloored, repainted and repaired.

Section 9, bridge 53, was rewooded throughout. No. 59 was rebuilt with a whipple truss. No. 71 was repaired with wrought-iron beams. West avenue lift-bridge, Rochester, was improved by the substitution of two twenty-one inch cylinders for its old motors. New gear wheels and hoisting chains were provided for this bridge; its shafting was relined and other repairs to it were made and, so far in the season, it has been kept in better working order than usual. But the extra size of this bridge and the heavy and constant strain to which it is subjected make its operation as a lift-bridge a source of constant care and expense to this department. Bridge 92 was rebuilt with the iron chords of old No. 62. Brockport lift-bridge was repaired and improved and a new lift-bridge was built by special appropriation at Rowe street in Rochester.

On section 10 a part of bridge No. 167 was rebuilt and nine bridges were replanked.

Section 11, Whipple arch bridge at Scott street over the Clark & Skinner slip in Buffalo was demolished in August last by the action of a teamster of the American Glucose Company, who drew the hub of a heavy wagon beneath the iron chord so as to throw it out of joint and allow the bridge to collapse. Falling with the bridge, one horse was killed and the teamster slightly injured. A temporary wooden bridge was erected in place of the fallen, structure which may serve for a time in its stead.

Culverts.

There are on this division of the canal and its adjuncts 131 culverts. Four of these, one at Adams Basin, two at Brockport and one at Holley, have been rebuilt this year by special appropriations, under contracts.

Banks.

Section 8. Towpath and berme bank have been raised and strengthened at various points.

Section 9. The western division scow DeWitt Clinton was engaged during a portion of the season in raising the towpath of the seventeen-mile level near Pittsford. The high embankment at Cartersville for a distance of three-quarters of a mile on both sides was thoroughly sheet-piled.

Section 10. In consequence of a dangerous leak on the east end of section 10, in the berme bank near Brockport, the western division scow De Witt Clinton was transferred from section 9 to assist in sheet-piling and strengthening the embankment at that point.

Section 11. Stone from Lockport and cinders from Buffalo were boated in large quantities to improve the towpath on Tonawanda creek, and piles were driven in many places for the same purpose.

Waste-weirs and stop-gates.

There are twenty-five waste-weirs and six stop-gates on the division, all in serviceable condition.

Aqueducts.

There are four aqueducts — at Lyons, Palmyra, Rochester and Medina — on the division. At Lyons, repairs of walls were made, and masonry was repointed; at Palmyra repairs of trunk, masonry and foundation were made. To Rochester and Medina aqueducts, which are stone throughout, nothing was done, though both need grouting and pointing.

Walls and docking.

On section 8 1,357 lineal feet of new docking were framed and laid and twenty rods of vertical and slope wall were built.

On section 9 1,700 feet of docking and 400 lineal feet of vertical wall were relaid.

On section 10 4,800 feet of docking were relaid and sixty feet of towpath planked.

On section 11 two miles of new docking were put in and 190 feet of vertical wall at the head of lock 72 built.

Western division shops.

These shops have been constantly employed during the year doing work for locks, bridges and other structures on the division. Six men — four carpenters and two blacksmiths, including foreman — comprise their operative force.

Dams.

There are six dams on this division — one across Tonawanda creek in, the village of Tonawanda, length 270 feet; one south of Medina to turn the waters of Tonawanda creek into Oak Orchard creek feeder, length 150 feet; one across Allen creek at Scottsville to supply Genesee valley feeder, length 112 feet; one across the Genesee river at Rochester to hold water for feeder at that point, length 510 feet; one across Oil creek near the village of Cuba to store the waters of that creek and divert them to the Genesee river as a source of supply to the Rochester feeder, length 2,200 feet; one two miles north of the last mentioned, to serve as a spillway for the reservoir, length 100 feet. Of these, all except the Rochester feeder dam are in tolerable condition. The latter, to be efficient, requires sheathing and other considerable repairs.

SPECIAL APPROPRIATIONS.

The following works under my charge or supervision were done by special appropriation during the year. An itemized account of expenditures made by me for each will be found under proper heads in the table appended:

Bird Island pier, chapter 302, *Laws* 1891.

The important work of improving and extending Bird Island pier, Buffalo, under acts chapter 295, Laws of 1890, and chapter 302, Laws of 1891, was completed in November, 1892.

Bottoming out, chapter 168, *Laws* 1890, *and chapter* 382, *Laws* 1891.

On sections 8, 9 and 10 a large force of men was employed during the time suitable for spring repairs, deepening waterways, removing bars, stones, etc., where necessary; and during the season of navigation the tug and dredge on section 11 were employed on the same kind of work, chargeable to the appropriation.

Ditching, chapter 240, *Laws* 1889.

Under this act work was done near Clyde, on section 8, and at the eastern and western wide waters, Rochester, section 9.

Black creek improvement, chapter 272, *Laws* 1891.

Under this act the waterways appertaining to Black creek, in the town of Clarence, Erie county, were cleaned and improved.

Cattaraugus reservation, chapter 302, *Laws* 1891.

By this act improvements of the public highways in the Cattaraugus Indian reservation were made.

Holley culvert, chapter 221, *Laws* 1891.

By this act a culvert in the old canal at Holley was rebuilt according to sanitary requirements.

Medina sewer, chapter 298, *Laws* 1891.

By this act a sewer extension was made under the Erie canal to Oak Orchard creek at Medina.

Brockport culverts, chapter 238, *Laws* 1891.

By this act two stone arched culverts were built at either side of the village of Brockport, by contract.

Adams Basin culvert, chapter 321, *Laws* 1891.

The culvert at Adams Basin, replaced by this act, was so damaged by the break at this point in 1888 as to make its further use dangerous.

Rowe street bridge, chapter 138, *Laws* 1891.

By this act a new lift-bridge was built to replace the iron arch bridge formerly over the canal at Rowe street in the city of Rochester.

RECOMMENDATIONS.

I respectfully recommend that $60,000 be added by the next Legislature to the appropriation of last winter for deepening the canal between Ferry and Commercial streets in the city of Buffalo, for reasons given under the head of navigation in this report.

There are in the city of Buffalo a number of bridges, constructed from twenty-five to forty years ago, of a strength altogether insufficient to carry the loads now commonly borne by trucks in that city. Teams and loads whose combined weight varies from seven to fifteen tons are constantly venturing across these bridges that are not safe for more than about six tons of load. To continue these bridges in use, therefore, is to endanger the lives and properties of those who have occasion to cross them. They should be at once replaced by bridges of adequate strength.

The large and growing lumber trade of Tonawanda is dependent on a single lock for entry from Tonawanda creek to the Erie canal, and should any accident occur to this lock, a great business and source of traffic to the canal would be practically closed for the time being. These considerations warrant, in my opinion, the building of a second lock at Tonawanda.

A ledge of rock a short distance west of Bushe's bridge, in that part of Tonawanda creek used as a portion of the canal, is a detriment to navigation during low water. With present facilities for submarine drilling it can and should be removed.

GEORGE CHAMBERS,
Assistant Superintendent.

AN ITEMIZED STATEMENT *of expenditures for ordinary repairs on the western division of the Erie canal for the year ending September* 30, 1892, *by* GEORGE CHAMBERS, *Assistant Superintendent.*

	Western div. office.	Western division.	Section 8.	Section 9.	Section 10.	Section 11.	Totals.
Expense, livery, cleaning, etc	$50 55	$85 47	$27 50	$19 00		$5 06	$187 58
Clerk, salary	1,200 00	840 00					2,040 00
Telegraph and telephone	33 52	323 99	117 79	2 55	$68 65	274 34	820 84
Postage	25 00						25 00
Stationery	17 20						17 20
Gas	2 72				215 82		218 54
Patrolmen and special agents		3,766 10	200 00	916 45	1,808 55	425 81	7,116 91
Labor on pay-rolls		6,520 92	931 02	1,184 48	1,037 75	1,804 73	11,478 90
Hardware		532 08	693 01	619 68	818 26	1,109 65	3,772 68
Coal		110 66	102 23	225 93	22 50	1,942 24	2,403 56
Paints and oils		77 18	99 96	213 66	26 37	224 21	641 38
Machinists and blacksmiths' work		2 40	442 85	258 23	1,189 60	1,067 77	2,960 85
Freight and cartage		60 75	165 04	598 80	58 23	9 64	892 46
Towing		2,190 00			15 00	127 50	2,332 50
Lumber		36 74	2,478 51	8,230 15	7,196 80	12,739 97	30,682 17
Stone, sand, cement, etc			386 28	251 55	63 30		701 13
Ship chandlery			181 19	214 50	40 65	500 46	936 80
Boat repairs			101 10	56 50	310 37	282 09	750 06
Rent and use of tools			218 83				218 83
Castings			3 87	201 48	532 56	109 01	846 92
Miscellaneous				11 41	2 54	4 00	17 95
Inspectors						188 00	188 00
Diving						40 00	40 00
Dredging						340 00	340 00
Totals	$1,328 99	$14,546 29	$6,149 18	$13,004 37	$13,406 95	$21,194 48	$69,630 26

Expenditures by GEORGE CHAMBERS, *Assistant Superintendent.*

On account of western division office	$1,328 99	
On acconnt of western division	14,546 29	
On account of section No. 8	6,149 18	
On account of section No. 9	13,004 37	
On account of section No. 10	13,406 95	
On account of section No. 11	21,194 48	
		$69,630 26

SECTION No. 8, ERIE CANAL — CHARLES H. FORD, *Superintendent.*

ANNUAL REPORT *showing the name and number of structures or works, the different heads of expenditure, and the total cost of each, on the line of the canal under the charge of Charles H. Ford, superintendent of repairs of thirty-six and twenty-seven hundredths miles of the Erie canal, extending from the eastern to the western line of Wayne county, during the fiscal year ending September* 30, 1892.

STRUCTURES OR WORKS, ETC.	Whole number on section.	Cost of new structures.	Cost of repairs of old, etc.	Total, new and old.
Locks	9	....	$1,709 20	$1,709 20
Lock-tending (exclusive of oil)	.....	....	10,710 00	10,710 00
Lock-gates	78	....	....	....
Aqueducts	2	....	435 00	435,00
Waste-weirs	4	....	....	....
Culverts	25	....	618 92	618 92
Farm bridges (wood)	7	$1,370 45	597 75	1,968 20
Farm bridges (iron)	1			
Road bridges (wood)	9			
Road bridges (iron)	23			
Towpath bridges (iron)	2			
State scows	2	....	....	....
Small boats	1	....	....	....
Lock-houses	7	....	....	....
Workshops	1	....	....	....
Watch-houses	9	....	....	....
Timber sheds	1	....	....	....
Raising and repairing towpath and berme bank (not including repairs to slope walls)	.....	....	5,303 63	5,303 63
Docking	.....	....	376 00	376 00
Watching canal	.....	....	1,680 00	1,680 00
Other miscellaneous expenditures	.....	....	2,304 15	2,304 15
Other work of consequence which does not come under any of the above heads, viz.:				
Publishing abstracts	.....	....	38 98	38 98
Filing abstracts	.....	....	2 17	2 17
Painting	.....	....	96 60	96 60
Superintendent's salary	.....	....	1,500 00	1,500 00
Total	.....	....	$26,742 85	$26,742 85

Locks.

New gates were inserted as follows, viz.: One set lower heelpath gates on lock 59 and one set on lock 57. A portion of lock and culvert was repaired, as follows: Bottom of lock 57 was removed and the foundation repaired and replanked; general repairs were made to gates, iron-work and platforms, with new cleating, and repointed all locks on section; new balance-beams were placed on lower towpath gates of lock 53, two on lock 54, one on lock 55, one on lock 59; upper gates replanked where necessary and usual repairs to paddles at various times during navigation. New foot-bridges have been constructed, viz.: One on lock 53 and one on lock 55. The watch-houses on locks, where necessary, have been reshingled and chimneys repaired, and houses, lock-gates, foot-bridges, etc., painted. A new upper crib was built at head of lock 58.

Bridges.

Bridge 43 (wood) has been superseded by a new one. The towpath abutment was taken down and the earth excavated under old foundation to a depth of three feet, and a lining of gravel put in, with substantial timber foundation and abutment relaid with necessary filling to approaches and new railings.

Bridge 17. The sidewalk approach on northwest end to bridge 17 was removed and a vertical wall constructed seventy-five feet long and eight feet high and filled with gravel on inside next to roadway, and a substantial sidewalk placed on wall with suitable railing, also walks on approaches to east side of bridge were raised and repaired.

Lift-bridge 4, in the village of Clyde, has had new floor and joists, with new sidewalks on each side and a flight of box stairs on each end of east sidewalk for use when bridge is run up, to accommodate pedestrians, with automatic guards to raise and lower with bridge to prevent persons from walking off. On the northwest approach to said bridge, along dock, a railing has been constructed for 175 lineal feet and railing and stairs painted, making for the first time since this bridge was constructed a complete and satisfactory job.

A new floor and joists were put on bridges 26 and 37, and partial reflooring and repairing to bridges were made where necessary.

Aqueducts.

The Palmyra aqueduct has received the following repairs, viz.: The sides have been renewed with new foundation, side and cap timbers, with necessary iron work and new planking; the masonry was repaired by removing cap-stone and injecting strong grout through masonry where water-worn, and thoroughly repointing walls.

Lyons aqueduct. The vertical walls adjoining abutments were thoroughly repaired and raised above water line and well grouted and pointed.

Waste-weirs.

The masonry to waste-weirs Nos. 1 and 2 was repaired and repointed.

Docking.

There has been framed and laid 1,357 lineal feet of new docking on section, as follows, viz.: One hundred and eighty feet berme bank above bridge 40; below lock No. 60, fifty-four feet; Clyde level, 168 feet; below bridge No. 15, 540 feet; below lock No. 55, 200 feet; below bridge No. 30, 120 feet; under bridge No. 34, thirty-five feet; adjoining Palmyra aqueduct, sixty feet.

Culverts.

The culverts on section have received careful attention and were thoroughly cleaned where sediment had collected.

Vertical and slope walls.

Vertical walls were relaid above bridge No. 40 and above bridge No. 32, and slope walls between change bridge No. 22 and railroad bridge about twenty rods.

Bottoming out.

A thorough job of bottoming out was done at different points from Waynesport east to lock No. 61; from lock No. 60 to lock No. 61; from Palmyra aqueduct to change bridge, through the villages of Palmyra, Port Gibson, Newark, Lyons, Lock Berlin and Clyde, and at various points on section where bars had collected; muskrat holes stopped and stones removed.

Scows.

Scows Palmyra and Tonawanda Chief and the carpenters' boat were thoroughly repainted. New floors were laid in cabins of Tonawanda Chief, and a large ice-box made for scow Palmyra.

Ditches.

State ditches have been cleaned as follows, viz.: Commencing at culvert No. 13, running east, 150 rods; commencing culvert No. 3, east, sixty rods; commencing bridge No. 3, east to culvert No. 4, about eighty rods; from bridge No. 9, east to culvert No. 14, about twenty rods; from culvert No. 14, east, 150 rods.

Towpath and berme bank repairs.

The towpath and berme banks have been graded at various points on section, and between bridges No. 30 and Port Gibson the towpath has been graded and raised in various places, and on berme bank the slope wall has been raised and bank heavily graveled. Ditches have been cut to drain towpath and noxious weeds were cut the entire length of section both sides of canal.

RECOMMENDATIONS.

Locks.

One set of new lower towpath gates with miter-sill and new upper lining to bottom of towpath, lock No. 53; repair tumble-gate platform in heelpath lock, four new paddles, lower towpath, lock No. 54; one set of lower heelpath gates with new miter-sill, lock No. 55; new tumble-gate platform, new gate, wedges and wedge cap, heelpath lock and new tumble-gate platform, wedges and wedge cap, towpath lock, four new paddles, lower gates of lock No. 56; remove upper half of bottom to culvert and lock, and grout under foundation and relay floors; excavate middle ground down to top of culvert and repair masonry at head of lock No. 57. This lock has given considerable trouble during the season, and a watercourse extends through the center of lock and water runs through masonry at foot of lock in consequence. There is also a leak under bottom, showing that water has cut through under foundation. The masonry at head of lock is water-worn, and although thoroughly pointed last spring still leaks badly. Other locks on section need usual repairs. The material for platforms and new work for lock No. 56 is framed and on ground; also new gates for lock No. 55, which were carried over for want of time last spring. I would recommend commencing this work as soon as possible after close of navigation.

Waste-weirs.

The waste-weir of Clyde needs new apron and some repairs to masonry in foundation walls. No. 4, at Newark, needs new planking on apron and masonry repointed.

Vertical walls.

The vertical wall under bridge No. 16 needs relaying, a portion of it having fallen in this season. The vertical wall west of bridge No. 39 needs taking down and relaying about sixty feet; also wall under southwestern approach to bridge No. 32.

Bridges.

A new bridge should be constructed in place of bridge No. 2 at Lock Pit. This is a highway bridge, and receives a large amount of heavy travel, as traction engines and crops, during the threshing season, and, by inspection, the bridge is deemed unsafe.

Bottoming out.

The sediment collected in bottom of canal should be removed from bridge No. 10, west to Lyons waste-weir, about two miles, and beginning one mile east of Clyde to east end of section.

The past season has been a very successful one for navigation. No sunken boats nor a moment's detention to navigation has occurred. The standard depth of water has been maintained over all miter sills.

C. H. FORD,
Superintendent of Repairs.

Dated CLYDE, N. Y., *October* 13, 1892.

SECTION No. 9, ERIE CANAL — JOHN S. GUNSAUL, *Superintendent.*

ANNUAL REPORT *showing the name and number of structures or works, the different heads of expenditure, and the total cost of each, on the line of the canal under the charge of John S. Gunsaul, superintendent of repairs of forty miles of the Erie canal, extending from east line of Monroe county to west end construction section No.* 284, *during the fiscal year ending September* 30, 1892:

STRUCTURES OR WORKS, ETC.	Whole number on section.	Cost of new structures.	Cost of repairs of old, etc.	Total, new and old.
Locks	5	....	$1,701 14	$1,701 14
Lock-tending (exclusive of oil)	......	....	6,308 70	6,308 70
Bridge-tending	......	....	1,769 97	1,769 97
Stop-gates	3	....	52 50	52 50
Aqueducts	1	....	16 00	16 00
Waste-weirs	7	....	....	....
Culverts	32	....	....	....
Weigh-locks	1	....	....	....
Farm bridges (wood) do (iron) Road bridges (wood) do (iron) Towpath bridges (wood) do do (iron)	78	....	2,412 15	2,412 15
State scows	2	....	271 00	271 00
Assisting boats in ice	......	....	45 91	45 91
Ice-breakers	2	....	....	....
Lock and bridge houses	11	....	....	....
Picking stone during spring repairs	......	....	70 00	70 00
Piling timber in sheds in State yard	......	....	232 35	232 35
Setting snubbing posts	......	....	51 71	51 71
Raising and repairing towpath and berme bank (not including repairs to slope walls)	......	....	3,586 90	3,586 90
Cutting weeds and eel grass	......	....	658 06	658 06
Building dams for winter use	......	....	36 00	36 00
Slope and vertical walls	......	....	1,418 50	1,418 50
Docking	......	....	528 29	528 29
Repairs of breaches	......	....	305 81	305 81
Watching canal	......	....	2,792 75	2,792 75
Tools, including shovels, picks, crowbars, axes, etc	......	....	22 00	22 00
Other work of consequence which does not come under any of the above heads, viz.:				
Registering water at weigh-lock on day watch at State yard	......	....	618 00	618 00
Moving material	......	....	428 25	428 25
Searching and filling rat holes	......	....	229 90	229 90
Sheet-piling on high embankment	......	....	764 00	764 00
Publishing and filing abstracts of expenditures	......	....	48 91	48 91
Superintendent's salary	......	....	1,500 00	1,500 00
Grand total	......	....	$25,868 80	$25,868 80

Bridges.

Bridge No. 52 received two new needle-beams and was partly rejoisted; No. 55 was rewooded completely; No. 59 was rebuilt, with Whipple truss, and received a lower wrought-iron chord, formerly used at No. 104, Doty's; No. 70, Weighlock avenue change bridge, had approach repaired with oak sill and protection railing; No. 71, Court street double roadway bridge and sidewalk, repaired with manufactured wrought-iron beams, formerly taken from Plymouth avenue bridge, besides being entirely rewooded; No. 76, Washington street bridge, had approach repaired with new guard-rail, iron braces and pickets; Caledonia avenue lift-bridge received new watch-house; No. 77, West avenue lift-bridge, was repaired with two twenty-one-inch motors, three new gear-wheels and two new hoisting chains, and the shafting was lined up and placed in good condition; No. 78, Ford street new roadway bridge, repaired, a sidewalk relaid, new, and bridge was also partly rejoisted; No. 79, towpath bridge, repaired with oak sills and protection railing on both sides; No. 86, Rowe street lift-bridge, repaired the gearing with new steel shaft, platform built over truss and new stairway erected; No. 92, Douglass Whipple truss-bridge, rebuilt with lower iron chord, at one time used at bridge No. 62, Culver road; No. 108, Brockport lift-bridge, repaired by one new hoisting chain, wheel and worm-gear, iron protection rail on heelpath side, new platform over truss and a new stairway.

Locks.

No. 62 was repaired by inserting two paddles and four paddle-boxes into lower towpath gates, repairing the paddles of stop-gates, repointing the masonry and taking up part of lock-bottom and grouting same; No. 63 received new platform under, new wedges, a new chain on tumble-gate of heelpath lock, one cast-iron chair, eight paddle-boxes and four paddles in towpath lock, and the paddles of stop-gates were repaired, both lock-bottoms grouted and replanked and the masonry repointed; No. 64 had new platform under, new wedges in tumble-gate, eight paddle-boxes and twelve cast-iron plug-rod chairs in heelpath gates, new jack-chain in wheel-pit, had gates repaired, paddles stopped and masonry repointed; No. 65 received one paddle and box in heelpath gates, upper gates were partly replanked, bulkhead replanked, paddles of stop-gates repaired and masonry repointed; No. 66, one cap-stick on tumble-gate, two paddle-boxes, four cast-iron knuckles in chairs, paddles stopped and gates repaired. The gearing to draw boats into all locks on section was renewed for this season.

Culverts.

The waste-weir culverts under locks Nos. 62, 63 and 64 were all grouted and replanked during the spring repairs.

Docks.

Seventeen hundred lineal feet of dock were relaid, the principal portion in the city of Rochester, and repairs to docks were made wherever found necessary.

Sheet-piling.

The sheet-piling on the high embankment at Cartersville, over the gorge of Irondequoit creek, was taken up and relaid with new sheeting for a distance of three-quarters of a mile, on both sides, and it has continued in a good state of repair.

Stop-gates.

The stop-gates at Adams Basin, Cartersville and Bushnell Basin were thoroughly overhauled and put in excellent condition.

Excavation.

Nearly two miles, on the berme side of the canal, was bottomed out during the season, the work being done at the following points: Perrinton street, Bushnell's Basin, the three-mile level, the four-mile grocery, Spencerport, Adams Basin and Brockport. Excavation was made to original canal bottom.

Walls.

The slope walls are repaired wherever necessary. About 400 lineal feet of vertical wall was relaid in the city of Rochester, and repairs were made to vertical walls at Fairport, Spencerport and Brockport.

Towpath and berme banks.

The towpath and berme banks have been repaired by graveling and strengthening them and otherwise improving their condition.

Water.

There has been a good depth of water during the season. Eel grass, which had somewhat impeded the flow, has been kept well down by dredging on the sixty and the seventeen-mile levels.

RECOMMENDATIONS.

The aqueduct across Genesee river should be pointed and the bottom grouted, as the mortar has fallen out to a considerable extent.

Walls.

The retaining wall along St. Paul street, at east end of aqueduct, should be improved and pointed.

At least 800 feet of vertical wall in the city of Rochester should be relaid. For this purpose there should be purchased about 400 yards of stone, as the walls from being so many times repaired are in a very broken condition.

Dams.

The dam across the Genesee at the head of the feeder is in bad condition; eight of the piers in the sluiceways need rebuilding, and about 400 lineal feet from the west side should be replanked.

Towing path.

The towing path on seventeen-mile level for one and one-half miles between Pittsford and Pittsford lock should be raised and graveled, it being not high enough to carry the amount of water necessary to keep the lower end of level up to target. The towing path of the three-mile level should be raised for a distance of two miles in length, as that portion of the bank is very low.

Bridges.

No. 90 is to be replaced with a new bridge, the lumber for which is in the yard at Rochester. No. 94 will be succeeded by an iron bridge formerly placed at Smith street, Rochester. This bridge will need to be repaired with new needle-beams and saddle block.

The bridge abutments all need repointing, and on a number of them the coping stone should be relaid.

Culverts.

The breast and wing walls of several of the culverts will have to be relaid.

JOHN S. GUNSAUL,
Superintendent Canal Repairs.

Dated at ROCHESTER, N. Y., *October* 24, 1892.

SECTION No. 10, ERIE CANAL — FRANK C. LILLIS, *Superintendent.*

ANNUAL REPORT *showing the name and number of structures or works, the different heads of expenditure, and the total cost of each, on the line of the canal under the charge of Frank C. Lillis, superintendent of repairs of about forty-eight miles of the Erie canal, extending from the west end of construction section No.* 284 *to and including Sulphur Spring guard-lock, during the fiscal year ending September* 30, 1892.

STRUCTURES OR WORKS, ETC.	Whole number on section.	Total, new and old.
Locks combined, five; guard-lock, one	6	$3,910 15
Lock-tending (exclusive of oil)	......	7,145 00
Bridge-tending	......	858 75
Lock-gates	36	....
Aqueducts	1	....
Waste-weirs	10	130 00
Culverts	66	45 75
Farm bridges (wood)	1	1,245 20
Road bridges (wood)	22	
Road bridges (iron)	47	
State scows	2	155 00
Small boats	1	....
Ice-breakers	2	275 50
Lock-houses and office	1	....
Workshops	2	....
Watch-houses	5	....
Storehouses	2	....
Timber sheds	1	....
Raising and repairing towpath and berme bank (not including repairs to slope walls)	......	4,442 00
Slope wall	......	590 75
Docking	......	810 00
Repairs of breaches, sheet-piling	......	99 25
Breaking ice and assisting boats in consequence of ice	......	97 00
Watching canal, O. O. C. feeder and guard-lock	......	2,925 00
Regulating water at Lockport	......	350 00
Watching State property	......	160 00
Other miscellaneous expenditures	......	610 00
Other work of consequence which does not come under any of the above heads, viz.:		
Publishing abstracts	......	71 25
Building guard-railing on towpath	......	901 00
Planking tunnel in State race	......	302 30
Teaming and piling lumber	......	420 00
Superintendent's salary	......	1,500 00
Total	......	$27,043 90

Locks.

During the spring the combined locks were thoroughly repaired, eight new gates put in; two in south side of lock 69, two in north side of lock 71, two in north side and two in south side of lock 67. Four new balance-beams were replaced, the stone work in lock 71 was repaired and checks for stop-timbers straightened. Three new culverts, two new slides and three new nigger-heads were put in and all others repaired where found necessary. The miter-sills, originally of stone, are badly broken and should be replaced with those of wood or wood and iron combined.

Guard-railing.

New guard-railing and docking on the towpath, extending from the head of the combined locks 1,270 feet, was put in during the spring.

Walls.

The walls which had caved in at various points during the winter were rebuilt in the spring.

Banks.

The two repair boats have been kept busy during the season raising and strengthening the banks. Several boat loads of stone dust were placed on the towpath from the head of the combined locks to bridge 164. The towpath and berme bank are now in first-class condition.

Aqueduct.

The aqueduct at Medina leaks badly; the earth should be removed from the top of the arch and the masonry grouted, puddled and the earth replaced; the remaining masonry should be repointed.

Waste-weirs.

The walls of the waste-weir at Albion were braced and repaired. The waste-weir at Maybee's is badly in need of repair.

Bulkheads and stop-gates.

The bulkheads at Albion swing-bridges and also the bulkheads at Knowlesville stop-gates should be rebuilt.

Culverts.

Nearly all the culverts on the section are in bad condition; the wing and breast walls have been loosened by the action of frost and many of them have fallen in. I recommend that they be repaired as soon as possible.

Docking.

Four thousand eight hundred and twenty-three lineal feet of docking have been renewed and sixty lineal feet of towpath covered with oak plank.

State boats.

The State boat Medina was repaired with new joists and floors and repainted. The State boat Albion was repaired with new planks in bow and stern. A new ice-breaker was built during the summer.

Grass drag.

The grass drag was in use during the months of June, July, August and September. It is worn out and a new one should be built during the winter.

Bridges.

Bridges Nos. 116, 117, 120, 121, 122, 127, 137, 161 and 162 have been replanked and new joists put in. Sections "A" and "C" of bridge No. 167 have been rebuilt. New sidewalks have been placed on bridges Nos. 145 and 162. The northeast corner of bridge No. 149 has been removed and new supports placed under it. New supports were placed under the chords of bridge No. 118. New rail timbers were placed on bridge No. 114 at Holley. Bridges No. 149 should be rebuilt and the lower wooden chords replaced by iron chords. I would recommend that all the bridges on the section be repainted.

Sunken boats.

Boat A. E. Betts, loaded with grain, struck pier at Pickard's bridge No. 174, and sank one-half mile east of guard-lock October 24, 1891; boat S. E. Anthony, loaded with grain, struck pier at guard-lock and sank one and one-half miles east of same November 5, 1891; boat McDonald, loaded with lumber, struck slope wall between Pendleton and guard-lock and sank one mile west of combined locks November 12, 1891; boat Clark Snooks, loaded with cement, struck pier at East Holley stop-gates and sank May 20, 1892; boat Niagara, loaded with lumber, struck pier at Knowlesville stop-gates and sank July 16, 1892. All of the above named boats were assisted to the dry-dock and no delay to navigation was caused by any of them.

Miscellaneous.

The railing on top of the wall on the south side of Canal street in the city of Lockport is in a dangerous condition, as the timbers have rotted in many places; it should be rebuilt at once. I would recommend the purchase of 2,000 feet of boom logs, 1,000 square and 1,000 round, for use in the deep cut above Lockport, as many of the logs now in use are worthless. I renew my recommendation of last year that the division wall between lock 70 and the State race be rebuilt. There have been no delays to navigation and an average depth of seven and one-half feet of water has been maintained on the lower miter-sill.

Respectfully submitted.

FRANK C. LILLIS,
Superintendent Section 10, *Erie Canal.*

SECTION No. 11 — ERIE CANAL — CHARLES McDONOUGH, *Supt.*

ANNUAL REPORT *showing the name and number of structures or works, the different heads of expenditure, and the total cost of each, on the line of the canal under the charge of* CHARLES McDONOUGH, *superintendent of repairs of twenty-eight miles of the Erie canal, extending from Sulphur Spring guard-lock to Buffalo, during the fiscal year ending September* 30, 1892.

STRUCTURES OR WORKS, ETC.	Whole number on section.	Total cost, new and old.
Locks	3	....
Lock-tending (exclusive of oil)	....	$3,757 50
Farm bridges (wood)	52	14,827 36
Farm bridges (iron)	3	
Road bridges (wood)	2	
Road bridges (iron)	29	
Towpath bridges (wood)	2	
Towpath bridges (iron)	5	
Harbor master	....	637 50
Assistant harbor master	....	510 00
Harbor scavenger	....	210 00
Transporting material	....	4,626 00
Pile-driving	....	3,141 90
Raising and repairing towpath and berme bank (not including repairs to slope walls)	....	13,777 98
Receiving and storing timber	....	404 25
Rebuilding vertical wall	....	2,084 75
Cleaning out bottom of canal	....	1,060 00
Watching canal days and State yard nights	....	1,555 00
Tending flood-gates and chopping ice from spillway at Tonawanda	....	552 00
Building new dump scow	....	848 00
Repairing stone superstructure on old Bird island pier,	....	860 25
Printing abstracts	....	58 50
Superintendent's salary	....	1,800 00
Total	....	$50,710 99

Water.

A good and sufficient depth of water has been maintained on this section during the season of 1892, but during the latter part of 1891 great trouble was experienced on account of low water, particularly at Buffalo between Hudson and Ferry streets.

Navigation.

Owing to the low condition of the water during the months of October and November of last year navigation was somewhat interfered with, but since the opening this spring boatmen have had free and unobstructed navigation the entire summer.

Towpath.

The towpath between Buffalo and Pendleton is in pretty good condition with the exception of a few places near Pendleton which need raising. The towpath for a half mile below Pendleton is in very bad condition and should be rebuilt. It was originally a vertical wall made of white oak piling, capped and sheet-piled; the piles have all rotted away to the edge of the water and there is nothing left but the ties to support the docking timber. Either new piles should be driven the entire length and recapped and sheet-piled or the old piles should be cut off at the water and built up with timber or stone. The towpath at this point should also be raised at least two feet.

At the request of Superintendent Chambers we have boated a very large quantity of stone and gravel from section ten (10), which had been removed from the bottom of the canal between Sulphur Springs guard-lock and Lockport, and used same in improving towpath and slope wall on Tonawanda creek. This material was found to be excellent for this purpose.

We have been engaged a portion of the summer with the steamboat Buffalo in boating cinders from Buffalo to Tonawanda and vicinity.

Locks.

The locks on this section are in fair condition. We have found it necessary to lift out the gates occasionally and repair the paddles and connections. The locks at Tonawanda will need new balance-beams and other repairs before the opening of navigation next season. The locks at Black Rock will need only ordinary repairs. The walls of the ship-lock will need considerable repairs, particularly the two upper courses of stone, which have been crushed and knocked out of place by the Tonawanda barges. We have the necessary cut stone now on hand for this work.

Berme banks.

Very little repairs were found necessary to be done to the berme bank during the past season. It will be necessary, next spring, to dredge out a large portion of the berme bank between Cornelius creek and Germania Park bridge. A large portion of the bank, about 200 feet long and forty feet wide, is gradually settling and sliding out into the canal, making the channel quite narrow at that point; after dredging, it will be necessary to drive a row of heavy piling to act as a retaining wall. This piece has been sloughing off for the past two years, and we cannot let it go any longer than spring.

Pile-driving.

The pile-driver has been at work continuously during the past season either as a steam derrick or driving piles. We have found it necessary to drive piles at Pickard's bridge, Sawyer's creek, Clark & Skinner's slip, Scott street bridge and at vertical wall at head of lock No. 72.

Bridges.

No new bridges have been built on this section during the season just closed. On August seventh last the Whipple arch bridge on Scott street, over the Clark & Skinner slip, in Buffalo, collapsed and fell into the canal. It was caused by a team owned by the American Glucose Company being driven so that the hub of a very heavy wagon struck the cast-iron arch and lifted it in such a manner as to break it and destroy the arch, thereby causing the collapse. The team and teamster went down with the bridge; one horse was killed and the teamster was slightly injured. I immediately set to work with dredge and derrick and removed the debris of the old bridge from the canal, and on the instructions of the Superintendent of Public Works I have had a temporary wooden bridge erected across the canal to accommodate the traffic which is constantly going over this bridge. This structure will answer its purpose for some time to come.

The two middle abutments at Pickard's bridge are in a dangerous condition and should be rebuilt at once. The wooden superstructure will also need a good deal of repairing; the timbers are old and need to be replaced by new.

The abutments to the Whipple arch bridge over lock slip at Tonawanda are also in very bad condition and should be taken down and rebuilt from the water up; the foundations are all right.

I would renew my recommendation in regard to the Whipple arch bridges over Erie, Scott, Michigan, Chicago, Lake and Prime streets in Buffalo, that they be replaced as soon as possible with new wrought-iron bridges of modern design.

We have recently made a thorough examination of these Whipple bridges and strengthened them in every possible manner, but as they are old and not intended for the heavy traffic of the present day it would be the proper thing to do to avoid danger and build bridges which we know are absolutely safe. The safety of the public demands the construction of these bridges.

Docking.

There are about seven miles of vertical wall on this section on which docking timber has to be maintained, and it requires a great deal of attention to keep it in good order. We have put in about two miles of timber during the season and it is now in fair condition.

Boats.

The State dredge is in first-class condition, and has been employed during the entire season bottoming out canal at the Buffalo end of the section, which resulted in our being able to maintain a good and sufficient depth of water for navigation purposes.

The tug Queen City is also in prime condition, and is engaged principally in towing mud scows from the dredge and also doing other necessary towing on section.

The steamboat Buffalo has been kept continually at work boating cinders, stone and gravel from Lockport and Buffalo to Tonawanda creek and vicinity. We have now on hand four old mud scows and one new one. The old ones are in very bad condition and it is with great difficulty that we are able to keep them in repair sufficiently to do our work. We have the material necessary for one new dump scow now in the State yard, and I would like to be permitted to build it during the coming winter.

Our two repair scows will have to be decked and their bottoms calked before commencing another season.

Our steam derrick boat is very old and the hull is soft and rotten, and as it is one of the most useful boats in our whole plant we should have a new scow about the same dimensions as the old one.

Vertical walls.

The vertical walls on this section are now in fair condition with the exception of that wall between Pendleton and the Sulphur Springs guard-lock, which is built of very small stone, and, consequently, we suffer a great deal from the wall sliding into the canal. It should be built up of heavy derrick stone.

Since my last report we have rebuilt the balance of the vertical wall at head of lock 72, about one hundred and ninety (190) feet in length, and the walls on both sides of the canal at this lock are in first-class condition.

The vertical wall at the head of the ship lock is tumbling in and should be rebuilt either with piling or timber at once, as it is very important. It is about two hundred and fifty (250) feet in length.

RECOMMENDATIONS.

I would respectfully call your attention to the importance of my recommendations in this my annual report. The construction of new wrought-iron bridges in place of the old Whipple arch bridges in this city should be strongly recommended to the Legislature, as the lives of our people are in constant danger, because these bridges are too light for the present traffic.

Pickard's bridge and abutments should be attended to at once.

A new mud scow should be built for use on this section. It is also absolutely necessary that a new derrick scow should be constructed, as the one we have at present is unsafe and unfit for use.

The vertical wall at head of ship lock, on the river side, should be torn down and rebuilt in a substantial manner, as this is a very important lock and is more than self-sustaining; consequently the State should keep it in good repair.

All of which is respectfully submitted.

CHAS. McDONOUGH,
Superintendent.

TABLES

ACCOMPANYING THE

ANNUAL REPORT OF THE SUPERINTENDENT OF PUBLIC WORKS.

TABLE

Exhibiting the date of the opening and closing of the Hudson river, and the number of days open; also the time of commencement and close of each navigable season of canals, and the number of days of navigation since 1824; also the date of the opening of Lake Erie since 1827.

OPENING AND CLOSING OF THE HUDSON RIVER.			COMMENCEMENT AND CLOSE OF NAVIGATION OF ERIE CANAL.			
River open.	River closed.	Days open.	Canal open.	Canal closed.	Navigable days.	Opening of the lake.
March 3, 1824	January 5, 1824	300	April 30, 1824	December 4	219	....
March 6, 1825	December 13, 1825	283	April 12, 1825	December 5	238	....
February 25, 1826	December 13, 1826	302	April 25, 1826	December 18	243	....
March 20, 1827	November 25, 1827	251	April 22, 1827	December 18	241	April 21, 1827
February 8, 1828	December 23, 1828	320	March 27, 1828	December 20	269	April 1, 1828
April 1, 1829	January 14, 1829	286	May 2, 1829	December 17	230	May 10, 1829
March 15, 1830	December 25, 1830	283	April 20, 1830	December 17	242	May 5, 1830
March 15, 1831	December 6, 1831	263	April 16, 1831	December 1	230	May 8, 1831
March 25, 1832	December 21, 1832	280	April 25, 1832	December 21	241	April 27, 1832
March 21, 1833	December 13, 1833	277	April 19, 1833	December 12	238	April 23, 1833
February 29, 1834	December 15, 1834	291	April 17, 1834	December 12	240	April 6, 1834
March 25, 1835	November 30, 1835	268	April 15, 1835	November 30	230	May 8, 1835
April 4, 1836	December 7, 1836	244	April 25, 1836	November 26	216	April 27, 1836
March 27, 1837	December 14, 1837	261	April 20, 1837	December 9	234	May 10, 1837
March 19, 1838	November 25, 1838	257	April 11, 1838	November 25	229	March 31, 1838
March 25, 1839	November 18, 1839	238	April 20, 1839	December 16	241	April 11, 1839
February 25, 1840	November 5, 1840	255	April 20, 1840	December 3	228	April 27, 1840
March 24, 1841	November 19, 1841	240	April 24, 1841	November 30	221	April 14, 1841
February 4, 1842	November 28, 1842	298	April 20, 1842	November 28	223	March 7, 1842
April 13, 1843	December 10, 1843	242	May 1, 1843	November 30	214	May 6, 1843
March 18, 1844	December 17, 1844	278	April 18, 1844	November 26	223	March 14, 1844
February 24, 1845	December 3, 1845	283	April 15, 1845	November 29	229	April 5, 1845
March 18, 1846	December 14, 1846	275	April 16, 1846	November 25	224	April 11, 1846
April 7, 1847	December 25, 1847	263	May 1, 1847	November 30	214	April 21, 1847
March 22, 1848	December 27, 1848	292	May 1, 1848	December 9	223	April 9, 1848
March 19, 1849	December 26, 1849	286	May 1, 1849	December 5	219	March 25, 1849
March 10, 1850	December 17, 1850	282	April 22, 1850	December 11	234	March 25, 1850
February 25, 1851	December 14, 1851	293	April 15, 1851	December 5	235	April 2, 1851
March 28, 1852	December 23, 1852	270	April 20, 1852	December 10	235	April 20, 1852
March 23, 1853	December 21, 1853	274	April 20, 1853	December 20	245	April 14, 1853*
March 17, 1854	December 8, 1854	266	May 1, 1854	December 8	217	April 29, 1854
March 27, 1855	December 20, 1855	268	May 1, 1855	December 10	224	April 21, 1855
April 11, 1856	December 14, 1856	248	May 5, 1856	December 4	214	May 2, 1856

February 27, 1857	December 27, 1857	303	May 6, 1857	December 15	228	April 27, 1857
March [20, 1858	December 17, 1858	278	April 28, 1858	December 8	225	April 15, 1858
March 13, 1859	December 10, 1859	273	April 15, 1859	December 12	242	April 7, 1859
March 6, 1860	December 14, 1860	283	April 25, 1860	December 12	232	April 17, 1860
March 5, 1861	December 23, 1861	294	May 1, 1861	December 10	224	April 13, 1861
April 4, 1862	December 19, 1862	259	May 1, 1862	December 10	224	April 15, 1862
April 3, 1863	December 11, 1863	252	May 1, 1863	December 9	223	April 3, 1863
March 11, 1864	December 12, 1864	277	April 30, 1864	December 8	223	April 13, 1864
March 22, 1865	December 16, 1865	270	May 1, 1865	December 12	226	April 26, 1865
March 20, 1866	December 15, 1866	270	May 1, 1866	December 12	226	April 28, 1866
March 26, 1867	December 8, 1867	257	May 6, 1867	December 20	229	April 21, 1867
March 24, 1868	December 5, 1868	252	May 4, 1868	December 7	217	April 19, 1868
April 5, 1869	December 9, 1869	248	May 6, 1869	December 10	218	May 1, 1869
March 31, 1870	December 17, 1870	261	May 10, 1870	December 8	213	April 16, 1870
March 12, 1871	November 29, 1871	263	April 24, 1871	December 1	220	April 1, 1871
April 7, 1872	December 9, 1872	247	May 13, 1872	December 1	202	May 6, 1872
April 16, 1873	November 22, 1873	221	May 15, 1873	December 5	205	April 29, 1873
March 19, 1874	December 12, 1874	269	May 5, 1874	December 5	215	April 18, 1874
April 13, 1875	November 29, 1875	229	May 18, 1875	November 30 (by ice)	297	May 12, 1875
April 1, 1876	December 2, 1876	245	May 4, 1876	December 1	211	May 4, 1876
March 30, 1877	December 31, 1877	277	May 8, 1877	December 7	214	April 17, 1877
March 14, 1878	December 20, 1878	282	April 15, 1878	December 7	237	March 24, 1878
April 4, 1879	December 20, 1879	261	May 8, 1879	December 6	212	April 24, 1879
March 5, 1880	November 25, 1880	266	April 20, 1880	November 21 (by ice)	216	March 19, 1880
March 21, 1881	January 2, 1881	288	May 17, 1881	December 8	206	May 1, 1881
March 8, 1882	December 5, 1882	273	April 11, 1882	December 7	241	March 26, 1882
March 29, 1883	December 15, 1883	261	May 7, 1883	December 1	208	May 4, 1883
March 25, 1884	December 19, 1884	269	May 6, 1884	December 1	209	April 25, 1884
April 7, 1885	December 7, 1885	247	May 11, 1885	December 1	205	May 2, 1885
March 30, 1886	December 3, 1886	248	May 1, 1886	December 1	214	April 25, 1886
April 6, 1887	December 20, 1887	258	May 7, 1887	December 1	209	April 17, 1887
April 7, 1888	December 14, 1888	252	May 10, 1888	December 3	208	April 14, 1888
March 19, 1889	Open all winter	286	May 1, 1889	November 30	214	April 10, 1889
Open entire year	December 2, 1890	337	April 28, 1890	November 30	217	March 31, 1890
March 24, 1891	December 24, 1891	277	May 5, 1891	December 5	215	April 13, 1891
April 1, 1892	December 22, 1892	266	May 1, 1892	December 5	219	April 10, 1892

STATEMENT *of the number of locks, their lift in feet, total lockage of each canal, etc., of all the canals in the State of New York.*

NAME OF CANAL.	Length in miles.	Lockage in feet.
Erie canal	351.78	654.80
Navigable feeders of same	3.35	....
Champlain canal	66.00	179.50
Pond above Troy dam	3.00	....
Glens Falls feeder and pond	12.00	132.00
Black River canal	35.33	1,082.25
Black River feeder	13.47	....
Black River improvement	42.50	....
Oneida Lake canal	6.00	62.00
Oswego canal	38.00	154.85
Oneida river improvement	20.00	7.85
Seneca river towing-path	5.00	....
Baldwinsville canal	1.00	8.00
Cayuga and Seneca canal	22.77	76.61
Cayuga inlet	2.00	....
Total	622.20	2,357.86

NAME OF CANAL.	Length in miles.	SIZE OF CANAL.			NUMBER AND SIZE OF LOCKS.			Average burden of boats.	Maximum burden of boats.
		Width on surface.	Width on bottom.	Depth of water.	Number of locks.	Length between quoins.	Width in clear.		
Erie canal	363	40	28	4	83	90	15	70	76
Enlargement of same	351¾	70	56	7	72	110	18	210	240
Oswego canal	38	40	24	4	18	90	15	70	76
Enlargement of same	38	70	56	7	18	110	18	210	240
Cayuga and Seneca canal	21	40	24	4	10	90	16	70	76
Enlargement of same	23	70	56	7	11	110	18	210	240
Champlain canal	66	50	35	5	20	110	18	85	120
Glens Falls feeder	12	50	35	5	12	100	18	80	85
Pond above Troy dam	3	....	....	....	1	....	....	....	.....
Black River canal and feeder	50	42	26	4	100	90	15	70	76
Black River improvement	42	....	....	....	1	110	18	70	76
Oneida river improvement	20	80	60	4½	2	120	30	70	76
Oneida Lake canal	7	70	56	7	7	110	18	220	220
Baldwinsville and Seneca towpath	5¾	40	24	4	1	90	15	70	76

ERIE CANAL.

[Total cost of construction, $51,609,200.]

REMARKS.	Old canal (not now in existence).	Enlargement.
Construction authorized	April 15, 1817	May 11, 1835.
Construction commenced	July 4, 1817	August, 1836.
Construction completed	October 26, 1836	September, 1862.
Estimated cost at engineers' prices	$4,926,738	$23,402,863.
Actual cost of construction	7,143,789	44,465,414.
Total feet of lockage	675½ feet	654 80-100 feet.
Length from Albany to Buffalo	363 miles	350½ miles.
Number locks and size of chambers	83 locks, 90x115	72 locks, 110x18.
Size of prism	40 and 28x4	70 and 56x7.
Maximum dimension of boats	78 62-100x14 46-100x3½, draft 1	98x17 5-12x6 feet draft.
Burden of boats	75 tons	240 tons.

LOCKS.

No. of lock.	Double or single.	Lift.	No. of lock.	Double or single.	Lift.	No. of lock.	Double or single.	Lift.
1......	Double.....	15½	25.....	Double......	8	49.........	Double......	6
2......	Double......	9½	26.....	Double......	8	50.........	Double......	6 11-12
3......	Double......	11¼	27.....	Double......	8	51.........	Double......	5½
4......	Double......	71¼	28.....	Double......	8	52.........	Double......	11
5......	Double......	10	29.....	Double......	7	53.........	Double......	6
6......	Double......	10	30.....	Double......	10½	54.........	Double,.....	7½
7......	Double......	10	31.....	Double......	6	55.........	Double......	6
8......	Double......	10	32.....	Double......	8	56.........	Double......	10
9......	Double......	10	33.....	Double......	6	57.........	Double......	8
10......	Double......	10	34.....	Double......	8	58.........	Double......	8
11......	Double......	10	35.....	Double......	8	59.........	Double......	8
12......	Double......	10	36.....	Double......	10	60.........	Double......	10
13......	Double......	10	37.....	Double......	10	61.........	Double......	9
14......	Double......	10	38.....	Double......	8½	62.........	Double......	9
15......	Double......	10	39.....	Double......	10⅓	63.........	Double......	9
16......	Double......	10	40.....	Double......	8	64.........	Double......	10
17......	Double......	10	41.....	Double......	8	65.........	Double......	10
18......	Double......	10½	42.....	Double......	8	66.........	Double......	9
19......	Double......	8½	43.....	Double......	8	67 68 69 70 71 Combined.	Double.	55 10-12
20......	Double......	10	44.....	Double......	10½			
21......	Double......	11½	45.....	Double......	10½			
22......	Double......	11½	46.....	Double......	3			
23......	Double......	8	47.....	Double......	10½			
24......	Double......	8	48.....	Double......	10½	2 gd. Blk. Rk. & Buf.	Double......	2

LOCATION OF LOCKS.

COUNTIES.	Number of locks.	COUNTIES.	Number of locks.
Albany..................	1 to 18, inclusive.	Onondaga..............	47 to 51, inclusive.
Saratoga..................	19 and 20.	Cayuga..................	52.
Schenectady.............	21 to 25, inclusive.	Wayne..................	53 to 60, inclusive.
Montgomery..............	26 to 34, inclusive.	Ontario..................	....
Herkimer..................	35 to 45, inclusive.	Monroe..................	61 to 66, inclusive.
Oneida.....................	46.	Orleans..................	....
Madison...................	....	Niagara..................	67 to 71, inclnsive.

CHAMPLAIN CANAL AND GLENS FALLS FEEDER.

Construction authorized..	April 15, 1817.
Glens Falls feeder authorized..	April, 1822.
Estimated cost of canal at engineers' prices.......	$871,000.
Navigation opened from Fort Edward to Lake Champlain................	November 24, 1819.
Canal completed from Waterford to Lake Champlain....................	1822.
Canal, cost of construction up to 1827......................................	$921,011.
Feeder, cost of construction up to 1837......................................	$91,944.
Total cost of both included improvements, exclusive of ordinary repairs. June, 1868..	$2,378,910.
Number of locks on canal, 20; feeder, 13....................................	Size, 110x18 and 100x15.
Length of canal, 66 miles; feeder, 7 miles; pond, 5 miles..................	78 miles.
Size of prism, canal and feeder...	40.26x4.
Size authorized, chapter 213, Laws 1860.............	50.35x5.
Total cost. including improvements and enlargement, up to 1875........	$4,044,000.

LOCKS.

CHAMPLAIN CANAL.						GLENS FALLS FEEDER.			
No.	Lift.	No.	Lift.	No.	Lift.	No.	Lift.	No.	Lift.
1	10¾	8	8¾	15	8	1	10	8	10
2	10¾	9	10	16	7	2	10	9	10
3	8½	10	9¾	17	3¼	3	10	10	10
4	9	11	11¼	18	9	4	10	11	11
5	9	12	9	19	9	5	10	12	11
6	9	13	10¼	20	10	6	10	13	10
7	9¼	14	8			7	10		

BLACK RIVER CANAL FEEDER AND BLACK RIVER IMPROVEMENT.

Construction authorized	April 19, 1836.
Construction commenced	January, 1838.
Estimated cost at engineers' prices	$1,068,437.
Estimated cost at contract prices	$2,431,669.
Canal completed	1849.
Cost of construction	$3,581,954.
Number and size of locks	100 locks, 90x15.
Length of canal to Lyons Falls	35 miles.
Length of river to Carthage and fall	42 miles; 9¼ feet.
Size of prism of canal and feeder	42 and 28x4.
Length of navigable feeder, and fall	10½ miles; 6 10-100 feet.
Burden of boats	45 to 50 tons.
Lockage of canal	1,082¼ feet.

LOCKS.

No.	Lift.	No.	Lift.	No.	Lift.	No.	Lift.	No.	Lift.
1	10	23	10	45	10	67	10	89	10
2	10	24	10	46	10	68	9	90	10
3	10	25	10	47	10	69	9	91	12
4	10	26	10	48	10	70	9	92	10
5	10	27	10	49	10	71	10	93	10
6	10	28	10	50	10	72	10	94	10
7	10	29	10	51	10	73	10	95	10
8	11	30	10	52	10	74	10	96	10
9	12	31	10	53	10	75	10	97	10
10	11	32	10	54	10	76	10	98	10
11	11	33	10	55	10	77	10	99	10
12	11	34	10	56	10	78	10	100	10
13	8	35	10	57	10	79	10	101	10½
14	8	36	10	58	10	80	9	102	10¼
15	8	37	10	59	10	81	9	103	4
16	10	38	10	60	10	82	9	104	10
17	8	39	10	61	10	83	9	105	10
18	10	40	10	62	10	84	9	106	11
19	8	41	10	63	10	85	10	107	11
20	10	42	10	64	10	86	11½	108	12
21	10	43	10	65	10	87	10	109	12
22	10	44	10	66	10	88	10		

ONEIDA LAKE CANAL AND ONEIDA RIVER IMPROVEMENT.

REMARKS.	Oneida lake canal.	Oneida river improvement.
Construction authorized	March 22, 1832	April 29, 1839.
Estimated cost at engineer's prices	$40,000	$100,049.
Construction completed	1836	1850.
Cost of construction	450,678	$368,164.
Purchased of company by State	May 11, 1840	For $50,000.
Enlargement of locks authorized	Chapter 46, Laws of 1860	
Number and size of new locks	7, 110x18	2, 120x30½.
Size of prism	40x26x4	80x60x4½.
Length	7 miles	20 miles.
Feet of lockage	60¼ feet	No. 1, 3 ft.; No. 2, 3¼ ft.

LOCKS.

PRESENT OLD LOCKS.						ENLARGED LOCKS AUTHORIZED.					
No.	Lift.	No.	Lift.	No.	Lift.	No.	Lift.	No.	Lift.	No.	Lift.
1	7½	4	10	6	7½	1	8½	4	10½	6	8
2	8½	5	9¼	7	6 1-12	2	8¼	5	9½	7	7½
3	9					3	8				

OSWEGO CANAL.

[Total cost, $4,992,926.]

REMARKS.	Oswego canal.	Enlarged Oswego canal.
Construction authorized	April 20, 1825	April 15, 1854.
Enlargement of locks		Chapter 262, Laws of 1847.
Estimated cost at engineer's prices	$277,000	$1,926,336.
Estimated cost at contract prices	437,000	2,051,190.
Construction completed	December 10, 1828	September, 1862.
Cost of construction	$565,437	$4,427,589.
Number of locks and size	18, 90x15	17, 110x18.
Feet of lockage	154, 85 feet	154, 85 feet.
Average cost of one lock	$10,000	$31,000
Size of prism of canal	40 and 26x4	70 and 56x7 feet.
Guard-locks	Six	Five.
Burden of boats	50 to 75 tons	230 tons.
Length of canal	38 miles	38 miles.

LOCKS.

No.	Lift.	No.	Lift.	No.	Lift.	No.	Lift.	No.	Lift.
1	11	4 }	9.68	8	11¼	12	11¼	16	8⅜
2	11	5 }		8	7¼	13	5.65	17	10½
3	10½	6	7	10	9	14	9½	18	9¼
		7	5.866	11	11⅜	15	5¾		

CAYUGA AND SENECA CANAL — CAYUGA INLET.

[Total cost, $2,232,632.]

REMARKS.	Cayuga and Seneca canal.	Cayuga inlet.
Construction authorized, enlargement of locks	April 20, 1825	May 25, 1836.
Enlargement of prism		April 15, 1854.
Estimated cost at engineer's prices	$811,188	$150,000.
Estimated cost at contract prices	795,273	160,396.
Canal completed	November 15, 1828	September, 1862.
Cost of construction	$2,010,320	$214,000.
Number of locks and size	11, 110x18	1, 110x18.
Feet of lockage	83½ feet	
Length and size of prism		24⅜ miles, 70 and 56x7.

LOCKS.

No.	Lift.	No.	Lift.	No.	Lift.	No.	Lift.	No.	Lift.
1	7.28	4	9	6	9.60	8	5.70	10	10
2	7	5	9	7	6	9	10	11	8
3	10								

A LIST *of the principal places on the canals, and their distance from each other, as adopted by the Canal Board.*

ERIE CANAL.

NAMES OF PLACES.	Albany.	West Troy.	Schenectady.	Fultonville.	Little Falls.	Utica.	Rome.	Syracuse.	Jordan.	Montezuma.	Lyons.	Palmyra.	Rochester.	Brockport.	Albion.	Medina.	Lockport.	Tonawanda.	Lower B. Rock.	Buffalo.
Adams' Basin	274	267	244	218	187	164	149	108	89	175	57	42	15	5	19	29	47	66	74	78
Albany	....	7	30	56	87	110	125	166	105	199	217	232	259	279	293	303	321	340	348	352
Albion	293	286	263	237	206	183	168	127	108	94	76	61	34	14	....	10	28	47	55	59
Auriesville	53	46	26	3	34	57	72	113	132	146	164	179	206	226	240	250	268	287	295	299
Belle Isle	172	165	142	116	85	62	47	6	13	27	45	60	87	107	121	131	149	168	176	180
Black Rock	349	342	319	293	262	239	224	183	164	150	132	117	90	70	56	46	28	9	1	3
Bolivar	152	145	122	96	65	42	27	14	33	47	65	80	107	127	141	151	169	188	196	200
Brighton	256	249	226	200	169	146	131	90	71	57	39	24	3	23	37	47	65	84	92	96
Brockport	279	272	249	223	192	169	154	113	94	80	62	47	20	....	14	24	42	61	69	73
Brockville	288	281	258	232	201	178	163	122	103	89	71	56	29	9	5	15	33	52	60	64
Brockways	269	262	239	213	182	159	144	103	84	70	52	37	10	10	24	34	52	71	79	83
Buffalo	352	345	322	296	265	242	227	186	167	153	135	120	93	73	59	49	31	12	4	....
Bushnell's Basin	248	241	218	192	161	138	123	82	63	49	31	16	11	31	45	55	73	92	100	104
Camillus	175	168	145	119	88	65	50	9	10	24	42	57	84	104	118	128	146	165	173	177
Canajoharie	68	61	38	12	19	42	57	98	117	131	149	164	191	211	225	235	253	272	280	284
Canastota	145	138	115	89	58	35	20	21	40	54	72	87	114	134	148	153	176	195	203	207
Canaseraga Landing	150	143	120	94	63	40	25	16	35	49	67	82	109	129	143	153	171	190	198	202
Canton	180	173	150	124	93	70	55	14	5	19	37	52	79	99	113	123	141	160	168	172
Cartersville	250	243	220	194	163	140	125	84	65	51	33	18	9	29	43	53	71	90	98	102
Centreport	192	185	162	130	105	82	67	26	7	7	25	40	67	87	101	111	129	148	156	160
Chittenango	151	144	121	95	64	41	27	15	34	48	66	81	108	128	142	152	170	189	197	201
Clyde	210	203	180	154	123	100	85	44	25	11	7	22	49	69	83	93	111	130	138	142
Cohoes	11	4	19	45	76	99	114	155	174	188	206	221	248	268	282	292	310	329	337	341
Cold Spring	186	179	156	130	99	76	61	20	1	13	31	46	73	93	107	117	135	154	162	166
Cooley's Basin	277	270	247	221	190	67	152	111	92	78	60	45	18	2	16	26	44	63	71	75
Crescent	14	7	16	42	73	96	141	152	171	185	203	218	245	265	279	289	307	326	334	338
Dunbarton	136	129	106	80	49	26	11	30	49	63	81	96	123	143	157	167	185	204	212	216
Durhamville	140	133	110	84	53	30	15	26	45	59	77	92	119	139	153	163	181	200	208	212
Eagle Harbor	296	289	266	240	209	186	171	130	111	97	79	64	37	17	3	7	25	44	52	66
East Arcadia	220	213	190	164	133	110	95	54	35	21	3	12	39	59	73	83	101	120	128	132
East Canada Creek	82	75	52	26	5	28	43	84	103	117	135	150	177	197	211	221	239	258	266	270
Fairport	244	237	214	188	157	134	119	78	59	45	27	12	15	35	49	59	77	96	104	108
Fort Plain	71	64	41	15	16	39	54	95	114	128	146	161	188	208	222	232	250	269	277	281

ERIE CANAL — (*Continued*).

NAMES OF PLACES.	Albany.	West Troy.	Schenectady.	Fultonville.	Little Falls.	Utica.	Rome.	Syracuse.	Jordan.	Montezuma.	Lyons.	Palmyra.	Rochester.	Brockport.	Albion.	Medina.	Lockport.	Tonawanda.	Lower B. Rock.	Buffalo.
Frankfort	101	94	71	45	14	9	24	65	84	98	116	131	158	178	192	202	220	239	247	251
Fullman's Basin	245	238	215	189	158	135	120	79	60	46	28	13	14	34	48	58	76	95	103	107
Fultonville	56	49	26	....	81	54	69	110	129	143	161	176	203	223	237	247	265	284	292	296
Fergusons	106	99	76	50	19	4	19	60	79	93	111	126	153	173	187	197	215	234	242	246
Gaines' Basin	295	388	265	239	208	185	170	129	110	96	78	63	36	16	2	8	26	15	53	57
Gasport	315	308	285	259	228	205	190	149	130	116	98	83	56	36	22	12	6	25	33	37
Geddes	168	161	138	112	81	58	143	2	17	31	49	64	91	111	125	135	153	172	180	184
Greece (six-mile grocery)	266	259	236	210	179	156	141	100	81	67	49	34	7	13	27	37	55	74	82	86
Higginsville	135	128	105	79	48	25	10	31	50	64	82	97	124	144	158	168	186	205	218	217
Hindsburgh	289	282	259	233	202	179	164	123	104	90	72	57	30	10	4	14	32	51	59	63
Hoffman's Ferry	40	33	10	16	47	70	85	126	145	159	177	192	219	239	253	263	281	300	308	312
Holley	284	277	254	228	197	174	159	118	99	85	67	52	25	5	9	19	37	56	64	68
Hulberton,	287	280	257	231	200	177	162	121	102	88	70	55	28	8	6	16	34	53	61	65
Ilion	98	91	68	42	11	12	27	68	87	101	119	134	161	181	195	205	223	242	250	254
Jordan	185	178	155	129	98	75	60	19	....	14	32	47	74	94	108	118	136	155	163	167
Junction	7	....	23	49	80	103	118	159	178	192	210	235	252	272	286	296	314	333	341	345
Kirkville	155	148	125	99	68	45	30	11	30	44	62	77	104	124	138	148	166	185	193	197
Knappsville	241	234	211	185	154	131	116	75	56	42	24	9	18	38	52	62	80	99	107	111
Knowlesville	299	292	269	243	212	189	174	133	114	100	82	67	40	20	6	4	22	41	49	53
Lenox	143	136	113	87	56	33	18	23	42	56	74	89	116	136	150	160	178	197	205	209
Limestone Feeder	159	152	129	103	72	49	34	7	26	40	58	73	100	120	134	144	162	181	189	193
Little Falls	87	80	57	31	....	23	38	79	98	112	130	145	172	192	206	216	334	253	261	265
Lock Berlin	214	207	184	158	127	104	89	48	29	15	3	18	45	65	79	89	107	126	134	138
Lockport	321	314	291	265	234	211	196	155	136	122	104	89	62	42	28	18	...	19	27	31
Lockville	323	216	193	167	136	113	98	57	38	24	6	9	36	56	70	80	98	117	125	129
Lock No. 65	253	246	223	197	166	143	128	87	68	54	36	21	6	26	40	50	68	87	95	99
Lodi	165	158	135	109	78	55	40	1	20	34	52	67	94	114	128	138	156	175	183	187
Loomis	127	130	107	81	50	27	12	29	48	62	81	95	122	142	156	166	184	203	211	215
Lower Black Rock	348	341	318	292	261	238	223	182	163	149	131	116	89	69	55	45	27	8	...	4
Lyons	217	210	187	161	130	107	92	51	32	18	....	15	42	62	76	86	104	123	131	135
Maybees	314	307	284	258	227	204	189	148	129	115	97	82	55	35	21	11	7	26	34	38
Macedon	236	229	206	180	149	126	111	70	51	37	19	4	23	43	57	67	85	104	112	116
Manlius	158	151	128	102	71	48	33	8	27	41	59	74	101	121	135	145	163	182	190	194
Martinsville	336	329	306	280	249	226	211	170	151	187	119	104	77	57	43	33	15	4	12	16
Medina	303	296	273	247	216	193	178	137	118	104	86	71	44	24	10	....	18	37	45	49

Middleport	309	302	279	253	222	199	184	143	124	110	92	77	50	30	16	6	12	31	39	43
Millards	318	311	288	262	231	208	193	152	133	119	101	86	59	39	25	15	3	22	30	34
Mindenville	78	71	48	22	9	32	47	83	107	121	139	154	181	201	215	225	243	262	270	274
Mohawk	95	88	65	39	8	15	30	71	90	104	122	137	164	184	198	208	226	245	253	257
Montezuma	199	192	169	143	112	89	74	33	14	....	18	33	60	80	94	104	122	141	149	153
Newark	224	217	194	168	137	114	99	58	39	25	7	8	35	55	69	79	97	116	124	128
New Beston Landing	149	142	119	93	62	39	24	17	26	50	68	88	110	130	144	154	172	191	199	203
New London	131	184	101	75	44	21	6	35	54	68	86	101	128	148	162	172	190	209	217	201
Nine-mile Creek	174	167	144	118	87	64	49	8	11	25	43	58	85	105	119	129	147	166	174	178
Orangeport	316	309	286	260	229	206	191	150	131	117	99	84	57	37	23	13	5	24	32	36
Oriskany	117	110	87	61	30	7	8	49	68	82	100	115	142	162	176	186	204	203	231	235
Orville Feeder	161	154	131	105	74	51	36	5	24	38	56	71	98	118	132	142	160	179	187	191
Palmyra	232	225	202	176	145	122	107	66	47	33	15	....	27	47	61	71	89	108	116	120
Pendleton	328	321	298	272	241	218	203	162	143	129	111	96	69	49	35	25	7	12	20	24
Peru	182	175	152	126	95	72	57	16	3	17	35	50	77	97	111	121	139	158	166	170
Picardsville	383	366	303	277	246	223	208	167	148	134	116	101	74	54	40	30	12	7	15	19
Pitt Lock	205	198	175	149	118	85	80	39	20	6	12	27	54	74	88	98	116	135	143	147
Pittsford	251	244	221	195	164	141	126	85	66	52	34	19	8	28	42	52	70	89	97	161
Pool's Brook	154	147	124	98	67	44	29	12	31	45	63	78	105	125	139	149	167	186	194	198
Port Byron	194	187	164	138	107	84	69	28	9	5	23	38	65	85	99	109	127	146	154	158
Port Gibson	227	220	197	171	140	117	102	61	42	28	10	5	32	52	66	76	94	113	121	125
Port Jackson	46	39	16	10	41	64	79	120	139	153	171	186	213	233	247	257	275	294	302	306
Reynale's Basin	313	306	283	257	226	203	188	147	128	114	96	81	54	34	20	10	8	27	35	39
Rochester	259	252	229	203	172	149	134	93	74	60	42	27	....	20	34	44	62	81	80	93
Rome	125	118	95	69	38	15	....	41	60	74	92	107	134	154	168	178	196	215	223	227
Schenectady	30	23	....	26	57	80	95	136	155	169	187	202	229	249	263	273	291	310	318	322
Schoharie Creek	51	44	21	5	36	59	74	115	134	148	166	181	208	228	242	252	270	289	297	301
Shelby Basin	306	299	276	250	219	196	181	140	121	107	89	74	47	27	13	3	15	34	42	46
Spencerport	271	264	241	215	184	161	146	105	86	72	54	39	12	8	22	32	50	69	77	81
Spraker's	65	58	35	9	22	45	60	101	120	134	152	167	194	214	228	238	256	275	283	287
St. Johnsville	76	69	46	20	11	34	49	90	109	123	141	156	183	203	217	227	245	264	272	276
Sulphur Springs G. Lock	326	319	296	370	239	216	201	160	141	127	109	94	67	47	33	23	5	14	22	26
Syracuse	166	159	135	110	79	56	41	....	19	33	51	66	93	113	127	137	155	174	182	186
Tonawanda	340	333	310	284	253	230	315	172	155	141	123	108	81	61	47	37	19	....	8	12
Upper Aqueduct	26	19	4	30	61	84	99	140	159	173	191	206	233	253	267	277	295	314	322	336
Utica	110	103	80	54	23	....	15	56	75	89	107	122	149	169	183	193	211	230	230	242
Wayneport	239	232	209	183	152	129	114	73	54	40	22	7	20	40	54	64	82	101	109	113
Weedsport	190	183	160	134	103	80	65	24	5	9	27	42	69	89	103	113	131	150	158	162
West Troy	7	....	23	49	80	103	118	159	178	192	210	225	252	272	286	296	314	333	341	345
Whitesboro	114	107	84	58	27	4	11	52	71	85	103	118	145	165	179	189	207	226	234	238
Yatesville	62	55	32	6	25	48	63	104	123	137	155	170	197	217	231	241	259	278	286	290
York Mills	113	106	83	57	26	3	12	53	72	86	104	119	146	166	180	190	208	227	235	239

CHAMPLAIN CANAL.

NAMES OF PLACES.	DISTANCE FROM.		
	Place to place.	Albany.	Whitehall.
Albany	....	....	73
West Troy	7	7	56
Junction	....	7	66
Waterford	3	12	51
Mechanicville	8	20	53
Stillwater village	4	24	49
Bleecker's Basin	2	26	43
Wilbur's Basin	2	28	45
Van Duzen's Landing	5	33	40
Schuylerville	3	36	37
Saratoga bridge	2	38	35
Fort Miller	3	41	32
Moses Kill	3	44	29
Fort Edward	5	49	24
Glens Falls feeder	2	51	22
Baker's Basin	1	52	21
Smith's Basin	5	57	16
Fort Ann	4	61	12
Comstock's Landing	4	65	......
Whitehall	8	73	......

GLENS FALLS FEEDER — CHAMPLAIN CANAL.

NAMES OF PLACES.	Distance from place to place.
Champlain canal	....
Sandy Hill	2
Glens Falls	3
Head of the feeder	2
Head of the pond	5
From Junction to Whitehall	64
Length of Glens Falls feeder	12
Length of pond above Troy dam	3
Total	79

OSWEGO CANAL.

NAMES OF PLACES.	DISTANCE FROM		
	Place to place.	Syracuse.	Oswego.
Syracuse	....	....	38
Salina	2	2	36
Liverpool	3	5	33
Mud Lock	2	7	31
Cold Spring	1	8	30
New Bridge	5	13	25
Three River Point	2	15	23
Phœnix	2	17	21
Sweet's Lock	3	20	18
Ox Creek	2	23	15
Fulton	4	27	11
Braddock's Rapid	4	31	7
Tiffany's Landing	4	35	8
High Dam	1	36	2
Oswego	2	38	....

CAYUGA AND SENECA CANAL.

NAMES OF PLACES.	DISTANCE FROM		
	Place to place.	Montezuma.	Geneva.
Montezuma	....	....	21
Seneca river	5	5	16
S. Dermont	2	7	14
Seneca Falls	3	10	11
Chamberlain's Mills	2	12	9
Waterloo	2	14	7
Teal's	5	19	2
Geneva	2	21	0
Lateral canal to East Cayuga village, two miles	2	....	....

ONEIDA LAKE CANAL AND FEEDER.

Extends from the Erie canal at Higgins, four miles west of New London, to the Oneida lake, as follows:

	Miles.
Canal proper, from Higgins to Wood creek	$3\frac{3}{4}$
Wood creek, with a towing-path to the Oneida creek	$2\frac{1}{4}$

BLACK RIVER CANAL.

NAMES OF PLACES.	DISTANCE FROM		
	Place to place.	Rome.	Boonville.
Rome	....	....	25
Ridge Mills	2	2	23
Lock No. 7	3	5	20
Walworth's Storehouse	1	6	19
Westernville	3	9	16
Wells Brook Aqueduct	2	11	14
Stringer's Creek	2	13	12
Lansing Kill	1	14	11
Lock No. 31	2	16	9
Lansing Kill dam or feeder	1	17	8
Lower Falls, Lansing Kill	2	19	6
Upper Falls, Lansing Kill	2	21	4
Lock No. 70	2	23	2
Boonville	2	25	....
Sugar river	3	28	3
Little Falls, Black river	1	29	4
Port Leyden	3	32	7
Lock No. 97	1	33	8
Lyons Falls	2	35	10
Hawkinsville, on feeder (three miles from Boonville)	....	28	3
A Lee's, on feeder	2	30	5
R. B. Miller's, on feeder	1	31	6
State dam, on feeder	4	35	10
Head of reservoir	2	37	12

ONEIDA RIVER IMPROVEMENT.

Names of places.	Distance from place to place.
Three River Point	....
Peter Scott creek	4
Oak Orchard	4
Caughdenoy	7
Brewerton	5

GENERAL SUMMARY.

	Miles.
Erie canal	352
Albany basin	1
Feeders	8
	361
Champlain canal	66
Glens Falls feeder	12
Pond above Troy dam	3
	81

	Miles.
Black River canal	35
Black River feeder and reservoir	12
Black River improvement	42
	89
Oneida Lake canal and feeder	7
Oswego canal	38
Baldwinsville side-cut	1
Oneida river improvement	20
Seneca river towing-path	5¾
Seneca river improvement	12¼
	77
Cayuga and Seneca canal	23
Total	638

REPORT

OF THE

SUPERINTENDENT OF PUBLIC WORKS

UPON THE

TRADE AND TONNAGE OF THE CANALS

FOR THE YEAR 1891.

19

ANNUAL ACCOUNT *of property (in tons of* 2,000 *pounds) carried upon the canal each week during the season of* 1892.

DAYS.	THE FOREST — PRODUCT OF WOOD.						
	Boards and scantling.	Shingles.	Timber.	Staves.	Wood.	Ashes, pot and pearl.	Ashes leached.
First to seventh	29,078	3	2,631	100	2,755	....	....
Eighth to fourteenth	32,080	83	62	78	1,918	685	....
Fifteenth to twenty-second	41,241	14	720	837	3,100	....	....
Twenty-third to close	39,033	....	1,373	481	5,672	290	....
Total, May	141,432	100	4,786	1,496	13,445	975	....
First to seventh	27,284	92	1,506	....	6,692	545	....
Eighth to fourteenth	27,550	89	2,940	323	4,995	86	....
Fifteenth to twenty-second	35,506	7	692	182	7,078	86	....
Twenty-third to close	40,904	82	4,160	441	7,576	828	....
Total, June	131,244	270	9,298	946	26,341	1,545	....
First to seventh	30,716	3	220	359	7,776	39	240
Eighth to fourteenth	25,052	93	625	143	4,614	7	....
Fifteenth to twenty-second	36,669	219	494	603	7,115	929	....
Twenty-third to close	42,758	88	695	263	9,584	....	476
Total, July	135,195	403	2,034	1,368	29,089	975	716

Annual account of property in tons carried — (Continued).

DAYS.	THE FOREST — PRODUCT OF WOOD.						
	Boards and scantling.	Shingles.	Timber.	Staves.	Wood.	Ashes, pot and pearl.	Ashes, leached.
First to seventh	30,961	35	1,519	428	8,669	....	716
Eighth to fourteenth	28,669	18	710	317	5,454	68	640
Fifteenth to twenty-second	32,558	30	1,110	203	5,068	140	....
Twenty-third to close	42,895	103	509	300	10,024	661	....
Total, August	135,083	186	3,848	1,248	29,315	869	1,356
First to seventh	33,608	17	538	470	5,746	233	....
Eighth to fourteenth	34,735	145	390	123	4,421	475	......
Fifteenth to twenty-second	45,372	183	330	377	4,707	....	17
Twenty-third to close	42,808	233	1,312	232	5,513	....	......
Total, September	156,523	578	2,570	1,202	20,387	708	17
First to seventh	45,442	31	1,027	748	6,250	150	....
Eighth to fourteenth	45,710	31	1,180	160	6,084	587	....
Fifteenth to twenty-second	39,615	97	720	203	3,531	56	....
Twenty-third to close	47,034	28	730	166	6,294	769	....
Total, October	177,801	187	3,657	1,277	22,159	1,562	....

First to seventh	44,784	89	350	90	2,352	474	....
Eighth to fourteenth	38,308	72	450	....	3,007	....	....
Fifteenth to twenty-second	47,283	15	715	204	1,299	63	....
Twenty-third to close	26,513	13	550	645	1,920	....	....
Total, November	156,888	189	2,065	939	8,578	537	....
First to	8,592	....	92	....	....	....	....
Eighth to	3,336	30	1,250	454	4,340	....	....
Fifteenth to	....	....	....	....	....	....	....
Total, December	....	....	....	....	....	....	....
Total for the year	1,046,094	1,943	29,600	8,930	153,554	7,171	2,089

Annual account of property in tons carried — (Continued).

DAYS.	AGRICULTURE — PRODUCT OF ANIMALS.				AGRICULTURE — VEGETABLE FOOD.			
	Pork.	Butter.	Lard, tallow and lard oil.	Hides.	Flour.	Wheat.	Rye.	Corn.
First to seventh	......	......	....	60	28	10,392	1,220	1,986
Eighth to fourteenth	......	......	....	......	53	23,150	......	927
Fifteenth to twenty-second	.....	......	....	......	70	44,790	......	1,520
Twenty-third to close	......	......	....	......	60	27,651	224	1,433
Total, May	......	......	....	60	211	105,983	1,444	5,866
First to seventh	......	3	....	11	122	12,693	......	1,809
Eighth to fourteenth	3	......	....	......	83	12,864	......	2,305
Fifteenth to twenty-second	......	......	....	......	93	12,640	......	1,841
Twenty-third to close	1	......	....	......	61	9,311	......	1,074
Total, June	4	3	....	11	359	47,508	......	7,029
First to seventh	......	5	....	......	51	17,013	......	767
Eighth to fourteenth	......	......	....	......	52	17,987	......	1,322
Fifteenth to twenty-second	8	......	....	......	345	18,741	......	2,341
Twenty-third to close	12	.....	....	......	126	13,351	......	1,688
Total, July	20	5	....	......	574	67,092	......	6,118

First to seventh	......	......	....	......	55	22,997	......	2,135
Eighth to fourteenth	......	......	....	......	567	21,919	......	2,278
Fifteenth to twenty-second	......	......	....	......	792	13,228	......	1,045
Twenty-third to close	......	......	....	10	333	40,191	10	2,373
Total, August	......	......	....	10	1,747	98,335	10	7,931
First to seventh	......	......	....	......	583	30,993	......	7,486
Eighth to fourteenth	......	......	....	......	314	28,539	......	4,609
Fifteenth to twenty-second	......	......	....	......	49	32,414	6	8,199
Twenty-third to close	8	......	....	......	75	30,518	......	12,127
Total, September	8	......	....	......	1,021	122,464	6	32,421
First to seventh	1	......	....	......	83	25,932	213	15,561
Eighth to fourteenth	1	......	....	......	88	19,808	14	21,024
Fifteenth to twenty-second	......	......	....	......	135	29,513	473	6,271
Twenty-third to close	1	......	....	......	148	22,597	1,628	7,154
Total, October	3	......	....	......	454	97,850	2,328	50,010
First to seventh	......	......	166	......	114	23,899	......	13,217
Eighth to fourteenth	......	......	....	......	59	15,716	448	16,875
Fifteenth to twenty-second	1	......	5	......	103	27,248	......	10,141
Twenty-third to close	......	......	5	......	205	11,580	......	661
Total, November	1	......	176	......	481	78,443	448	40,894

Annual account of property in tons carried — (Continued).

DAYS.	AGRICULTURE — PRODUCT OF ANIMALS.				AGRICULTURE — VEGETABLE FOOD.			
	Pork.	Butter.	Lard, tallow and lard oil.	Hides.	Flour.	Wheat.	Rye.	Corn.
First to	......	......	....	......	32	3,093	......	....
Eighth to	......	......	....	......	.....	....	......	....
Fifteenth to	......	......	....	......	......	....	......	....
Total, December............	......	......	....	......	32	3,093	......	....
Total for the year...........	36	8	176	81	4,879	620,768	4,236	150,269

Annual account of property in tons carried — (Continued).

DAYS.	Agriculture — Vegetable Food.								
	Corn meal.	Barley.	Barley malt.	Oats.	Bran and ship stuffs.	Peas and beans.	Apples.	Potatoes.	Dried fruit.
First to seventh	......	479	204	293	44	238	......	180	16
Eighth to fourteenth	423	......	692	......	15	....	......	......	.....
Fifteenth to twenty-second	......	......	411	2,111	53	....	4	......	.....
Twenty-third to close	216	......	179	1,895	53	....	.....	3	112
Total, May	639	479	1,486	4,299	165	238	4	183	128
First to seventh	......	......	276	1,890	79	....	......	......	.....
Eighth to fourteenth	506	779	391	3,632	119	....	......	......	.....
Fifteenth to twenty-second	583	......	179	5,910	11	....	......	......	.....
Twenty-third to close	......	......	189	5,897	212	....	......	......	.....
Total, June	1,089	779	1,035	17,329	421	....	......	......	.....
First to seventh	......	108	499	4,827	43	112	......	......	.....
Eighth to fourteenth	605	486	......	1,608	33	1	......	......	.....
Fifteenth to twenty-second	605	452	595	7,061	28	....	......	......	.....
Twenty-third to close	......	......	189	5,128	101	....	......	......	.....
Total, July	1,210	1,046	1,283	18,624	205	113	......	......	.....

Annual account of property in tons carried — (Continued).

DAYS.	AGRICULTURE — PRODUCT OF ANIMALS.				AGRICULTURE — VEGETABLE FOOD.			
	Pork.	Butter.	Lard, tallow and lard oil.	Hides.	Flour.	Wheat.	Rye.	Corn.
First to	......	......	....	......	32	3,093	......	....
Eighth to	......	......	....	......	.....	....	......	....
Fifteenth to	......	......	....	......	......	....	......	....
Total, December	......	......	....	......	32	3,093	......	....
Total for the year	36	8	176	81	4,879	620,768	4,236	150,269

Annual account of property in tons carried — (Continued).

DAYS.	AGRICULTURE — VEGETABLE FOOD.								
	Corn meal.	Barley.	Barley malt.	Oats.	Bran and ship stuffs.	Peas and beans.	Apples.	Potatoes.	Dried fruit.
	......	479	204	293	44	238	......	180	16
eenth	423	......	692	......	15	....	......	......	.....
enty-second	......	......	411	2,111	53	....	4	......	.....
to close	216	......	179	1,895	53	....	.....	8	112
Total, May	639	479	1,486	4,299	165	238	4	188	128
First to seventh	......	......	276	1,890	79	....	......	......	.....
Eighth to fourteenth	506	779	391	3,632	119	....	......	......	.....
Fifteenth to twenty-second	583	......	179	5,910	11	....	......	......	.....
Twenty-third to close	......	......	189	5,897	212	....	......	......	.....
Total, June	1,089	779	1,035	17,329	421	....	......	......	.....
First to seventh	......	108	499	4,827	43	112	......	......	.....
Eighth to fourteenth	605	486	......	1,608	33	1	......	......	.....
Fifteenth to twenty-second	605	452	595	7,061	28	....	......	......	.....
Twenty-third to close	......	......	189	5,128	101	....	......	......	.....
Total, July	1,210	1,046	1,283	18,624	205	113	......	......	.....

Annual account of property in tons carried — (Continued).

DAYS.	AGRICULTURE — VEGETABLE FOOD.								
	Corn meal.	Barley.	Barley malt.	Oats	Bran and ship stuffs.	Peas and beans.	Apples.	Potatoes.	Dried fruit.
First to seventh	......	......	650	2,463	20	....	......	......	.....
Eighth to fourteenth	......	......	204	4,408	20	....	......	......	.....
Fifteenth to twenty-second	......	......	187	3,156	58	....	......	......	.....
Twenty-third to close	......	459	187	7,098	125	....	......	......	.....
Total, August	......	459	1,228	17,125	223	....	......	......	.....
First to seventh	......	312	390	2,204	35	....	......	......	.....
Eighth to fourteenth	583	......	187	147	21	....	......	......	.....
Fifteenth to twenty-second	......	......	540	263	37	....	4	......	.....
Twenty-third to close	......	987	......	1,507	118	....	......	......	.....
Total, September	583	1,299	1,117	4,121	211	....	4	......	.....
First to seventh	......	1,680	175	598	117	....	......	......	.....
Eighth to fourteenth	......	4,291	221	48	48	....	......	......	.....
Fifteenth to twenty-second	......	5,486	354	979	68	....	......	......	.....
Twenty-third to close	......	4,752	6,991	906	141	....	....	......	.....
Total, October	......	16,209	7,741	2,531	374	....	......	......	.....

First to seventh	......	4,652	......	173	301	....	717	1,335	28
Eighth to fourteenth	......	10,694	384	3,418	81	....	733	2,523	.....
Fifteenth to twenty-second	......	8,870	609	4,129	200	234	519	3,431	.....
Twenty-third to close	583	5,503	......	695	212	34	669	1,525	.....
Total, November	583	29,719	993	8,415	794	268	2,638	8,814	28
First to	......	1,606	......	......	25	....	......	......	.....
Eighth to	......	......	.....	......	......	....	......	......	.....
Fifteenth to	......	......	......	......	......	...	......	......	.....
Total, December	......	1,606	......	......	25	....	......	......	.....
Total for the year	4,104	51,596	13,887	72,444	2,418	619	3,151	9,632	168

Annual account of property in tons carried — (Continued).

DAYS.	ALL OTHER AGRICULTURAL PRODUCTS.			MANUFACTURES.				
	Hemp.	Clover and grass seed.	Flax seed.	Domestic spirits.	Oil meal and cake.	Leather.	Furniture.	Bar and pig lead.
First to seventh	......	....	9,293	3	......	......	......	......
Eighth to fourteenth	......	....	1,414	....	......	......	......	......
Fifteenth to twenty-second	......	....	2,370	....	......	......	1	......
Twenty-third to close	......	159	1,659	2	......	......	......	......
Total, May	......	159	14,736	5	......	......	1	......
First to seventh	......	....	4,632	....	......	......	......	......
Eighth to fourteenth	......	....	2,646	....	1	......	10	......
Fifteenth to twenty-second	......	....	2,371	....	......	......	......	......
Twenty-third to close	......	....	4,483	22	......	......	......	......
Total, June	......	....	9,962	22	1	......	10	......
First to seventh	......	....	1,412	....	......	......	......	......
Eighth to fourteenth	......	....	3,748	....	......	......	......	......
Fifteenth to twenty-second	......	....	4,584	....	......	......	......	......
Twenty-third to close	......	1	5,124	....	......	......	......	......
Total, July	......	1	14,868	....	......	......	......	......

First to seventh	43	....	2,097	....	......	......	......	....
Eighth to fourteenth	......	....	2,292	....	......	......	......	....
Fifteenth to twenty-second	45	....	3,519	....	......	13	......	....
Twenty-third to close	......	13	6,507	3	......	......	......	....
Total, August	88	13	14,415	3	......	13	......	......
First to seventh	221	....	4,927	....	......	......	......	....
Eighth to fourteenth	......	....	5,782	....	......	......	......	....
Fifteenth to twenty-second	131	....	3,735	1	......	......	......	....
Twenty-third to close	179	....	3,346	1	......	......	......	....
Total, September	531	....	17,790	2	......	......	......	....
First to seventh	45	....	711	....	......	......	1	....
Eighth to fourteenth	95	....	2,367	....	......	......	......	....
Fifteenth to twenty-second	17	....	4,006	....	......	......	......	67
Twenty-third to close	......	....	4,030	....	......	......	......	....
Total, October	157	....	11,114	....	......	......	1	67
First to seventh	......	....	3,569	....	......	......	......	....
Eighth to fourteenth	......	....	4,642	16	......	......	......	....
Fifteenth to twenty-second	......	15	7,891	....	......	......	......	....
Twenty-third to close	......	....	432	13	......	......	......	....
Total, November	......	15	16,534	29	......	......	......	....

Annual account of property in tons carried — (Continued).

DAYS.	ALL OTHER AGRICULTURAL PRODUCTS.			MANUFACTURES.				
	Hemp.	Clover and grass seed.	Flax seed.	Domestic spirits.	Oil meal and cake.	Leather.	Furniture.	Bar and pig lead.
First to	......	....	....	....	......	......	......	....
Eighth to	......	....	....	....	......	......	......	....
Fifteenth to	......	....	....	....	......	......	......	....
Total, December............	......	....	....	....	......	.....	......	....
Total for the year...........	776	188	99,419	61	1	13	12	67

Annual account of property in tons carried — (Continued).

DAYS.	MANUFACTURES.						MERCHANDISE.	
	Pig iron.	Bloom and bar iron.	Castings and ironware.	Domestic woolens.	Domestic salt.	Foreign salt.	Sugar.	Molasses.
First to seventh	112	179	....	....	529	485	5	......
Eighth to fourteenth	220	....	1	....	2,640	89	52	18
Fifteenth to twenty-second	806	319	....	....	1,347	2	17	1
Twenty-third to close	902	....	202	....	3,278	269	118	......
Total, May	2,040	498	203	....	7,794	845	192	19
First to seventh	254	....	....	....	3,275	504	577	......
Eighth to fourteenth	1,937	177	243	74	2,097	439	240	......
Fifteenth to twenty-second	1,086	....	337	165	2,504	123	152	6
Twenty-third to close	553	56	....	....	1,388	......	108	15
Total, June	3,830	233	577	239	9,264	1,066	1,077	21
First to seventh	1,268	....	213	....	1,891	......	60	......
Eighth to fourteenth	1,688	173	249	....	1,325	......	102	3
Fifteenth to twenty-second	2,430	....	....	....	3,469	......	34	8
Twenty-third to close	978	....	....	2	3,702	......	167	36
Total, July	6,364	173	462	2	10,387	....	363	47

Annual account of property in tons carried — (Continued).

DAYS.	MANUFACTURES.						MERCHANDISE.	
	Pig iron.	Bloom and bar iron.	Castings and ironware.	Domestic woolens.	Domestic salt.	Foreign salt.	Sugar.	Molasses.
First to seventh	795	205	200	....	2,362	470	2	....
Eighth to fourteenth	880	....	....	....	1,043	......	......	....
Fifteenth to twenty-second	392	84	123	....	15,677	......	59	5
Twenty-third to close	543	179	103	....	972	......	7	357
Total, August	2,610	468	426	....	20,054	470	68	362
First to seventh	460	....	115	....	2,470	......	105	....
Eighth to fourteenth	1,574	....	....	....	1,065	195	1	....
Fifteenth to twenty-second	1,378	....	111	....	2,205	140	......	....
Twenty-third to close	1,529	....	29	....	7,421	372	15	67
Total, September	4,941	....	255	....	13,161	707	121	67
First to seventh	1,310	168	126	....	1,203	......	8	....
Eighth to fourteenth	683	....	....	....	3,528	......	91	49
Fifteenth to twenty-second	1,523	....	221	....	2,982	183	131	41
Twenty-third to close	1,036	134	39	....	2,365	......	3	11
Total, October	4,552	302	386	....	10,078	183	233	101

First to seventh	1,004	112	....	....	5,362	......	1	4
Eighth to fourteenth	432	128	....	....	2,535	.....	16	....
Fifteenth to twenty-second	773	....	....	....	5,841	......	1	21
Twenty-third to close	1,421	....	....	....	4,830	19	24	....
Total, November	3,630	240	....	....	18,568	19	42	25
First to	......	....	....	....	600	......	......	....
Eighth to	......	....	....	....	......	......	......	....
Fifteenth to	......	....	....	....	......	......	......	....
Total, December	......	....	....	....	600	......	......	....
Total for the year	27,967	1,914	2,309	241	89,906	3,290	2,096	642

Annual account of property in tons carried — (Continued).

DAYS.	MERCHANDISE.						OTHER ARTICLES.		
	Coffee.	Nails, spikes and horseshoes.	Iron and steel.	Railroad iron.	Flint, enamel, crockery and glassware.	All other merchandise.	Phosphate.	Stone, lime and clay.	Copper ore.
First to seventh	....	......	867	....	....	11,946	336	26,465	.....
Eighth to fourteenth	45	1	265	....	60	10,743	......	15,779	.....
Fifteenth to twenty-second	20	......	129	....	....	7,858	130	13,177	.....
Twenty-third to close	....	1	......	374	....	17,939	453	21,242	.....
Total, May	65	2	1,261	374	60	48,486	919	76,663	.....
First to seventh	....	......	......	....	3	10,604	1,506	15,958	.....
Eighth to fourteenth	125	22	88	....	67	14,472	1,027	17,098	.....
Fifteenth to twenty-second	....	1	965	....	....	10,387	665	13,953	.....
Twenty-third to close	....	26	......	....	....	18,149	1,228	21,480	.....
Total, June	125	49	1,053	....	70	53,612	4,426	68,489	.....
First to seventh	....	30	34	....	15	8,027	761	15,745	.....
Eighth to fourteenth	....	......	112	....	....	11,907	547	17,224	.....
Fifteenth to twenty-second	....	......	134	....	68	11,225	......	19,336	.....
Twenty-third to close	8	181	195	150	....	10,065	787	25,945	.....
Total, July	8	211	475	150	83	41,224	2,095	78,250	.....

First to seventh	....	33	90	....	....	9,663	503	12,348	.....
Eighth to fourteenth	....	......	731	....	....	6,191	1,195	15,601	.....
Fifteenth to twenty-second	2	21	638	....	....	6,031	112	18,380	.....
Twenty-third to close	....	135	1,230	....	....	16,507	241	34,208	.....
Total, August	2	189	2,689	....	....	38,392	2,051	80,537	.....
First to seventh	....	......	140	....	....	6,423	392	20,437	.....
Eighth to fourteenth	....	......	......	....	....	8,959	353	15,292	.....
Fifteenth to twenty-second	....	20	364	....	....	9,507	10	16,282	.....
Twenty-third to close	....	151	112	....	30	13,959	......	29,205	.....
Total, September	....	171	616	....	30	38,848	755	81,216	.....
First to seventh	....	......	165	....	....	6,573	123	15,888	.....
Eighth to fourteenth	....	110	328	....	....	6,934	403	17,608	.....
Fifteenth to twenty-second	....	203	5	....	90	9,676	1,905	21,507	201
Twenty-third to close	....	.....	113	....	....	11,470	2,538	39,751	.....
Total, October	....	313	611	....	90	34,653	4,969	94,754	201
First to seventh	....	......	243	....	....	8,753	874	14,529	.....
Eighth to fourteenth	....	......	......	....	....	4,778	1,089	11,600	.....
Fifteenth to twenty-second	....	......	......	....	....	4,260	1,770	14,116	.....
Twenty-third to close	....	......	......	....	....	4,027	......	22,867	.....
Total, November	....	......	243	....	....	21,818	3,733	63,112	.....

Annual account of property in tons carried — (Continued).

DAYS.	MERCHANDISE.						OTHER ARTICLES.		
	Coffee.	Nails, spikes and horseshoes.	Iron and steel.	Railroad iron.	Flint, enamel, crockery and glassware.	All other merchandise.	Phosphate.	Stone, lime and clay.	Copper ore.
First to	....	......	......	....	....	490	......	4,575	.....
Eighth to	....	......	......	....	....	1,267	......	9,150	.....
Fifteenth to	....	......	......	....	....	....	......	....	.....
Total, December	....	......	......	....	....	1,757	......	13,725	.....
Total for the year	204	935	6,948	524	333	280,790	18,948	556,748	201

Annual account of property in tons carried— (Continued).

DAYS.	MINERAL COAL.		OTHER ARTICLES.			Total tons.
	Anthracite.	Bituminous.	Petroleum.	Iron ore.	Sundries.	
First to seventh	24,937	2,112	16	2,613	490	130,095
Eighth to fourteenth	16,475	2,551	4	1,159	933	112,615
Fifteenth to twenty-second	22,462	3,234	15	5,420	591	152,770
Twenty-third to close	42,970	3,931	....	5,505	548	178,227
Total, May	106,844	11,828	35	14,697	2,562	573,707
First to seventh	27,684	2,181	5	7,062	280	123,357
Eighth to fourteenth	25,026	2,611	15	5,163	788	129,942
Fifteenth to twenty-second	23,950	1,656	39	5,258	522	128,948
Twenty-third to close	53,971	3,040	403	3,265	1,143	180,066
Total, June	130,631	9,488	462	20,748	2,733	562,313
First to seventh	17,448	3,940	386	4,066	35	118,109
Eighth to fourteenth	23,753	3,203	570	4,429	379	122,040
Fifteenth to twenty-second	25,786	4,603	568	4,132	393	152,975
Twenty-third to close	30,343	3,870	214	4,659	1,913	162,801
Total, July	97,330	15,616	1,738	17,286	2,720	555,925

Annual account of property in tons carried — (Concluded).

DAYS.	MINERAL COAL.		OTHER ARTICLES.			Total tons.
	Anthracite.	Bituminous.	Petroleum.	Iron ore.	Sundries.	
First to seventh	21,147	3,879	824	4,453	538	130,300
Eighth to fourteenth	16,922	3,018	596	2,119	620	116,480
Fifteenth to twenty-second	19,152	4,677	784	2,251	661	130,301
Twenty-third to close	26,532	3,026	783	4,234	1,137	201,995
Total, August	83,753	14,600	2,987	13,057	2,956	579,076
First to seventh	15,308	2,423	419	3,763	864	141,082
Eighth to fourteenth	21,172	2,509	402	4,866	1,260	138,119
Fifteenth to twenty-second	21,475	2,444	379	6,457	410	157,547
Twenty-third to close	33,392	2,463	627	7,207	487	196,100
Total, September	91,347	9,839	1,827	22,293	3,021	632,848
First to seventh	23,258	2,762	837	3,668	824	155,678
Eighth to fourteenth	13,981	2,859	181	7,773	766	157,074
Fifteenth to twenty-second	21,946	2,551	11	6,344	1,044	162,497
Twenty-third to close	34,301	3,379	238	5,914	1,683	207,131
Total, October	93,486	11,551	1,267	23,699	4,317	682,380

First to seventh	8,894	2,441	472	5,090	1,629	145,718
Eighth to fourteenth	9,377	2,791	333	5,797	355	136,657
Fifteenth to twenty-second	22,780	4,077	210	9,722	825	177,387
Twenty-third to close	70,443	8,239	9	4,223	50	167,910
Total, November	111,494	17,548	1,024	24,832	2,859	627,672
First to	25,031	2,011	....	....	100	46,247
Eighth to	....	....	....	....	....	21,827
Fifteenth to	....	....	....	....	....	....
Total, December	25,031	2,011	....	....	100	68,074
Total for the year	739,916	92,481	9,340	136,612	21,268	4,281,995

ANNUAL STATEMENT *showing total tons of way freight going east on the canals during the season of* 1892.

OFFICES.	THE FOREST — PRODUCT OF WOOD.						
	Boards and scantling.	Shingles.	Timber.	Staves.	Wood.	Ashes, pot and pearl.	Ashes, leached.
West Troy	8,687	....	1,802	....	4,919	....	....
Syracuse	2,538	5	103	16	4,001	4,724	....
Rochester	16	....	....	570	....	....	....
Tonawanda	40,981	1,013	3,274	100	330	....	....
Buffalo	27,641	53	40	7,210	....	....	....
Waterford	159,749	....	755	....	31,055	....	....
Whitehall	228	....	182	....	51,228	....	....
Oswego	16,240	395	....	247	6,849	....	240
Geneva	513	....	....	....	....	....	....
Boonville	18,626	....	....	....	14,060	....	....
Rome	7,140	....	2,000	30	2,076	....	....
Total	282,359	1,466	8,156	8,173	114,518	4,724	240

Annual statement of way freight going east — (Continued).

OFFICES.	AGRICULTURE — PRODUCT OF ANIMALS.				AGRICULTURE — VEGETABLE FOOD.						
	Pork.	Butter.	Lard, tallow and lard oil.	Hides.	Flour.	Wheat.	Rye.	Corn.	Barley.	Barley malt.	Oats.
West Troy	....	....	......	....	......	....	....	......	......	832	....
Syracuse	8	6	5	11	1,168	3,340	....	85	281	1,639	16
Rochester	....	....	......	....	......	1,499	....	232	7,240	785	....
Tonawanda	....	....	......	....	......	....	....	......	......	......	....
Buffalo	....	....	......	....	849	96,074	....	22,755	12,123	......	2,754
Waterford	....	....	......	....	76	....	59	......	......	......	....
Whitehall	....	....	......	....	......	....	....	......	......	......	2
Oswego	....	....	5	....	273	2,660	....	5,368	307	......	....
Geneva	....	....	......	....	......	....	....	......	......	214	....
Boonville	....	....	......	....	......	....	....	......	......	......	....
Rome	....	....	......	....	......	....	....	9	......	......	....
Total	8	6	10	11	2,366	103,573	59	28,449	19,951	3,470	2,772

Annual statement of way freight going east — (Continued).

OFFICES.	AGRICULTURE — VEGETABLE FOOD.			MANUFACTURES.				MERCHANDISE.		
	Bran and ship-stuffs.	Apples.	Potatoes.	Domestic spirits.	Pig iron.	Castings and ironware.	Domestic salt.	Molasses.	Flint, enamel, crockery and glassware.	All other merchandise.
West Troy	......	137	......	......	......	......	......	......	....	50,602
Syracuse	1,244	468	1,068	......	......	......	58,871	......	55	8,850
Rochester	44	4,093	......	......	232	54	12,290	.....	....	12,753
Tonawanda	......	......	......	......	250	......	......	......	....	....
Buffalo	798	......	......	......	659	......	......	......	....	7,130
Waterford	10	1,461	4,464	5	......	......	......	......	....	10,470
Whitehall	......	......	......	......	.....	......	......	......	....	....
Oswego	44	......	......	35	......	......	......	......	....	113
Geneva	......	......	......	......	......	......	......	......	....	....
Boonville	......	......	......	......	......	......	......	......	....	1
Rome	......	......	......	......	......	20	1	1	....	1,376
Total	2,140	6,159	5,532	40	1,141	74	71,162	1	55	91,295

Annual statement of way freight going east — (Concluded).

OFFICES.	OTHER ARTICLES.						Total tons.
	Stone, lime and clay.	Rock and super-phosphates.	Anthracite coal.	Bituminous coal.	Petroleum.	Sundries.	
West Troy	24,308	....	16,370	....	......	....	107,657
Syracuse	28,694	....	129,805	3,138	50	190	250,379
Rochester	23,649	90	....	2,443	......	411	66,401
Tonawanda	....	....	....	....	......	131	46,079
Buffalo	3,110	....	....	27,763	12	1,674	210,645
Waterford	41,929	....	....	....	......	22	250,055
Whitehall	1,218	....	....	....	......	135	52,993
Oswego	3,450	....	2,154	1,753	......	95	40,228
Geneva	....	....	1,471	39,418	......	260	41,876
Boonville	216	....	....	....	......	....	32,903
Rome	1,763	....	1,338	20	......	....	15,774
Total	128,337	90	151,138	74,535	62	2,918	1,114,990

ANNUAL STATEMENT *showing total tons of way freight going west on the canals during the season of* 1892.

OFFICES.	THE FOREST — PRODUCT OF WOOD.						AGRICULTURE — PRODUCT OF ANIMALS.			
	Boards and scantling.	Shingles.	Timber.	Staves.	Wood.	Ashes, pot and pearl.	Pork.	Cheese.	Butter.	Hides.
Albany	11,899	......	380	....	......	162	....	....	....	.....
West Troy	5,364	......	3,291	....	1,506	......	3	1	....	.....
Syracuse	584	3	46	50	4,326	167	....	....	3	11
Rochester	91	......	......	139	4,304	......	....	....	....	.....
Tonawanda	864	......	1,112	....	......	......	....	....	....	.....
Waterford	270	......	160	....	......	......	....	....	....	.....
Whitehall	....	......	......	....	......	......	....	....	....	.....
Oswego	....	......	......	....	......	......	....	....	....	.....
Geneva	171	......	......	....	......	......	....	....	....	.....
Boonville	64	......	......	....	......	......	7	....	....	.....
Rome	1,228	......	750	....	......	......	....	....	....	.....
Total	20,535	3	5,739	189	10,136	329	10	1	3	11

Annual statement of way freight going west — (Continued).

OFFICES.	AGRICULTURE — VEGETABLE FOOD.									
	Flour.	Wheat.	Corn.	Corn meal.	Barley.	Barley malt.	Oats.	Bran and shipstuffs.	Peas and beans.	Apples.
Albany	59	1	1,167	......	......	......	893	234	1	.....
West Troy	7	31	......	4,796	......	128	249	......	....	.....
Syracuse	30	122	15	......	7	......	......	19	....	225
Rochester	....	216	......	......	......	......	......	......	....	153
Tonawanda	....	....	......	......	......	......	......	......	....	4
Waterford	....	....	......	......	......	......	......	......	....	.....
Whitehall	....	....	......	......	......	......	......	......	....	.....
Oswego	....	....	......	......	......	......	......	......	....	.....
Geneva	....	....	......	......	......	......	......	......	....	.....
Boonville	35	....	605	......	......	......	58	26	....	2
Rome	....	....	......	......	......	......	......	......	....	.....
Total	131	370	1,787	4,796	7	128	1,200	279	1	384

Annual statement of way freight going west — (Continued).

OFFICES.	All other agricultural products — clover and grass seed.	MANUFACTURES.							
		Domestic spirits.	Furniture.	Pig iron.	Bloom and bar iron.	Castings and ironware.	Domestic woolens.	Domestic salt.	Foreign salt.
Albany	16	......	1	657	112	425	76	23	71
West Troy	....	......	10	5,568	115	98	....	......	173
Syracuse	....	.....	......	125	......	......	......	16,566	.....
Rochester	....	......	......	......	......	......	......	......	.....
Tonawanda	....	18	......	......	......	......	......	......	.....
Waterford	....	......	......	......	......	260	......	......	.....
Whitehall	....	......	......	......	......	......	......	......	.....
Oswego	....	......	......	......	......	......	......	......	.....
Geneva	....	......	......	......	......	......	......	......	.....
Boonville	....	3	1	......	......	......	......	12	.....
Rome	....	......	......	......	......	400	......	......	.....
Total	16	21	12	6,350	227	1,183	76	16,601	244

Annual statement of way freight going west — (Continued).

OFFICES.	MERCHANDISE.						
	Sugar.	Molasses.	Coffee.	Nails, spikes and horseshoes.	Iron and steel.	Flint, enamel, crockery and glassware.	All other merchandise.
Albany	1,206	65	10	....	315	38	3,343
West Troy	317	2	....	22	277	22	12,513
Syracuse	70	....	....	....	75	8	18,594
Rochester	....	....	....	....	....	209	10,817
Tonawanda	....	....	....	....	....	....	6,700
Waterford	....	....	....	....	....	....	974
Whitehall	....	....	....	....	....	....	....
Oswego	....	....	....	....	....	....	....
Geneva	....	....	....	....	....	....	....
Boonville	25	....	....	7	6	....	408
Rome	....	....	....	....	....	....	2,431
Total	1,618	67	10	29	673	277	55,780

Annual statement of way freight going west — (Concluded).

OFFICES.	OTHER ARTICLES.							Total tons.
	Stone, lime and clay.	Rock and superphosphates.	Anthracite coal.	Bituminous coal.	Petroleum.	Iron ore.	Sundries.	
Albany	22,672	5,408	34,676	....	354	......	......	84,264
West Troy	33,654	4,036	122,681	1,439	......	2,840	2,427	201,570
Syracuse	50,518	188	83,384	2,288	198	......	1,971	179,593
Rochester	6,401	122	29,129	....	......	......	156	51,737
Tonawanda	87,985	....	....	....	......	......	2,125	98,808
Waterford	2,882	....	42,435	134	......	......	12	47,127
Whitehall	....	....	....	....	......	......	......	....
Oswego	....	....	....	....	......	......	......	....
Geneva	21,439	....	6,991	5,200	......	......	......	33,801
Boonville	604	....	1,901	780	......	......	......	4,544
Rome	846	....	1,769	778	......	......	......	8,202
Total	227,001	9,754	322,966	10,619	552	2,840	6,691	709,646

ANNUAL STATEMENT *showing total tons of way freight going east and west during the season of* 1892.

OFFICES.	THE FOREST — PRODUCT OF WOOD.						
	Boards and scantling.	Shingles.	Timber.	Staves.	Wood.	Ashes, pot and pearl.	Ashes, leached.
Albany	11,899	....	380	....	....	162	....
West Troy	14,051	....	5,093	....	6,425	....	....
Syracuse	3,122	8	149	66	8,327	4,891	....
Rochester	107	....	....	709	4,304	....	....
Tonawanda	41,845	1,013	4,386	100	330	....	....
Buffalo	27,641	53	40	7,210	....	....	....
Waterford	160,019	....	915	....	31,055	....	....
Whitehall	228	....	182	....	51,228	....	....
Oswego	16,240	395	....	247	6,849	....	240
Geneva	684	....	....	....	....	....	....
Boonville	18,700	....	....	....	14,060	....	....
Rome	8,368	....	2,750	30	2,076	....	....
Total	302,904	1,469	13,895	8,362	124,654	5,053	240

Annual statement of way freight going east and west — (Continued).

OFFICES.	PRODUCT OF ANIMALS.					AGRICULTURE — VEGETABLE FOOD.			
	Pork.	Cheese.	Butter.	Lard, tallow and lard oil.	Hides.	Flour.	Wheat.	Rye.	Corn.
Albany	....	....	....	......	......	59	1	......	1,167
West Troy	3	1	....	......	......	7	31	......	....
Syracuse	8	....	9	5	22	1,198	3,462	......	100
Rochester	....	....	....	......	......	......	1,715	......	232
Tonawanda	....	....	....	......	......	......	....	......	....
Buffalo	....	....	....	......	......	849	96,074	......	22,755
Waterford	....	....	....	......	......	76	....	59	....
Whitehall	....	....	....	......	......	......	....	......	....
Oswego	....	....	....	5	......	273	2,660	......	5,368
Geneva	....	....	....	......	......	......	....	......	....
Boonville	7	....	....	......	......	35	....	......	605
Rome	....	....	....	......	......	......	....	......	9
Total	18	1	9	10	22	2,497	103,943	59	30,236

Annual statement of way freight going east and west — (Continued).

OFFICES.	AGRICULTURE — VEGETABLE FOOD.								All other agricultural products — clover and grass seed.
	Corn meal.	Barley.	Barley malt.	Oats.	Bran and shipstuffs.	Peas and beans.	Apples.	Potatoes.	
Albany	......	......	......	893	234	1	......	......	16
West Troy	4,796	......	960	249	......	......	137	......	....
Syracuse	......	288	1,639	16	1,263	......	693	1,068	....
Rochester	......	7,240	785	......	44	......	4,246	......	....
Tonawanda	......	......	......	......	......	......	4	......	....
Buffalo	......	12,123	......	2,754	798	......	......	......	....
Waterford	......	......	......	......	10	......	1,461	4,464	....
Whitehall	......	......	......	2	......	......	......	......	....
Oswego	......	307	......	......	44	......	......	......	....
Geneva	......	......	214	......	......	......	......	......	....
Boonville	......	......	......	58	26	......	2	......	....
Rome	......	......	......	......	......	......	......	......	....
Total	4,796	19,958	3,598	3,972	2,419	1	6,543	5,532	16

Annual statement of way freight going east and west — (Continued).

OFFICES.	MANUFACTURES.							
	Domestic spirits.	Furniture.	Pig iron.	Bloom and bar iron.	Castings and ironware.	Domestic woolens.	Domestic salt.	Foreign salt.
Albany	......	1	657	112	425	76	23	71
West Troy	......	10	5,568	115	98	....	....	173
Syracuse	......	......	125	......	....	....	75,437	....
Rochester	......	......	232	......	54	....	12,290	....
Tonawanda	18	......	250	......	....	....	....	....
Buffalo	......	......	659	......	....	....	....	....
Waterford	5	......	....	......	260	....	....	....
Whitehall	......	......	....	......	....	....	....	....
Oswego	35	......	....	......	....	....	....	....
Geneva	......	......	....	......	....	....	....	....
Boonville	3	1	....	......	....	....	12	....
Rome	......	......	....	......	420	....	1	....
Total	61	12	7,491	227	1,257	76	87,763	244

Annual statement of way freight going east and west — (Continued).

OFFICES.	MERCHANDISE.						
	Sugar.	Molasses.	Coffee.	Nails, spikes and horseshoes.	Iron and steel.	Flint, enamel, crockery and glassware.	All other merchandise.
Albany	1,206	65	10	....	315	38	3,343
West Troy	317	2	....	22	277	22	63,115
Syracuse	70	....	....	....	75	63	27,444
Rochester	....	....	....	....	....	209	23,570
Tonawanda	....	....	....	....	....	....	6,700
Buffalo	....	....	....	....	....	....	7,130
Waterford	....	....	....	....	....	....	11,444
Whitehall	....	....	....	....	....	....	....
Oswego	....	....	....	....	....	....	113
Geneva	....	....	....	....	....	....	....
Boonville	25	....	....	7	6	....	409
Rome	....	1	....	....	....	....	3,870
Total	1,618	68	10	29	673	332	147,138

Annual statement of way freight going east and west — (Concluded).

OFFICES.	OTHER ARTICLES.							Total tons.
	Stone, lime and clay.	Rock and superphosphates.	Anthracite coal.	Bituminous coal.	Petroleum.	Iron ore.	Sundries.	
Albany	22,672	5,408	34,676	......	354	......	......	84,264
West Troy	57,962	4,036	139,051	1,439	......	2,840	2,427	309,227
Syracuse	79,212	188	213,189	5,426	248	......	2,161	429,972
Rochester	30,050	212	29,129	2,443	......	......	567	118,138
Tonawanda	87,985	....	....	......	......	......	2,256	144,887
Buffalo	3,110	....	....	27,763	12	......	1,674	210,645
Waterford	44,811	....	42,435	134	......	......	34	297,182
Whitehall	1,218	....	....	......	......	......	135	52,993
Oswego	3,450	....	2,154	1,753	......	......	95	40,228
Geneva	21,439	....	8,462	44,618	......	......	260	75,677
Boonville	820	....	1,901	780	......	......	......	37,457
Rome	2,609	....	3,107	798	......	......	......	24,039
Total	355,338	9,844	474,104	85,154	614	2,840	9,609	1,824,709

ANNUAL STATEMENT *showing total tons of through freight going east during the season of* 1892.

OFFICES.	THE FOREST — PRODUCT OF WOOD.						AGRICULTURE — VEGETABLE FOOD.		
	Boards and scantling.	Shingles.	Timber.	Staves.	Wood.	Ashes, leached.	Flour.	Wheat.	Rye.
Tonawanda	435,370	320	2,830	......	......	....	......	....	......
Buffalo	35,974	12	......	......	......	400	2,344	515,103	3,997
Whitehall	175,470	17	......	60	18,340	.....	......	....	......
Oswego	39,192	98	......	......	......	1,432	......	2,146	199
Boonville	67,655	......	8,928	......	178	.....	......	....	......
Total	753,661	447	11,758	60	18,518	1,832	2,344	517,249	4,196

Annual statement of through freight going east — (Continued).

OFFICES.	AGRICULTURE — VEGETABLE FOOD.						
	Corn.	Barley.	Barley malt.	Oats.	Peas and beans.	Apples.	Potatoes.
Tonawanda	....	....	....	....	....	....	....
Buffalo	118,751	25,447	2,674	67,609	....	....	....
Whitehall	....	....	....	671	....	801	1,389
Oswego	289	4,976	1,824	....	472	....	....
Boonville	....	....	....	....	....	....	1,176
Total	119,040	30,423	4,498	68,280	472	801	2,565

Annual statement of through freight going east — (Continued).

OFFICES.	All other agricultural products — flax seed.	MANUFACTURES.			MERCHANDISE.		
		Pig iron.	Bloom and bar iron.	Castings and ironware.	Nails, spikes and horseshoes.	Iron and steel.	All other merchandise.
Tonawanda		805					
Buffalo	99,345	5,232		90			
Whitehall		5,238	678	1	90	40	110
Oswego							
Boonville							75
Total	99,345	11,275	678	91	90	40	185

Annual statement of through freight going east — (Concluded).

OFFICES.	OTHER ARTICLES.						Total tons.
	Stone, lime and clay.	Copper ore.	Bituminous coal.	Petroleum.	Iron ore.	Sundries.	
Tonawanda	....	....	....	....	....	....	439,325
Buffalo	1,702	201	1,452	9,774	....	274	890,381
Whitehall	820	....	....	....	133,753	3,612	341,090
Oswego	....	....	....	....	....	30	50,658
Boonville	....	....	....	....	....	....	78,012
Total	2,522	201	1,452	9,774	133,753	3,916	1,799,466

ANNUAL STATEMENT *showing total tons of through freight going west during the season of* 1892.

OFFICES.	THE FOREST — PRODUCT OF WOOD.				AGRICULTURE — PRODUCT OF ANIMALS.		
	Boards and scantling.	Timber.	Ashes, pot and pearl.	Ashes, leached.	Pork.	Lard, tallow and lard oil.	Hides.
Albany	772	160	2,285	17	....	166	....
West Troy......................	159	240	....	....	....	....	60
Waterford	660	2,900	....	....	20	....	....
Total........................	1,591	3,300	2,285	17	20	166	60

Annual statement of through freight going west — (Continued).

OFFICES.	AGRICULTURE — VEGETABLE FOOD.						ALL OTHER AGRICULTURAL PRODUCTS.	
	Flour.	Barley.	Barley malt.	Oats.	Peas and beans.	Dried fruit.	Hemp.	Clover and grass seed.
Albany	......	446	136	......	97	40	730	107
West Troy	......	776	178	......	......	128	45	137
Waterford	23	......	......	5	2,016	....	....	....
Total	23	1,222	314	5	2,113	168	775	244

Annual statement of through freight going west — (Continued).

OFFICES.	MANUFACTURES.								
	Domestic spirits.	Leather.	Bar and pig lead.	Pig iron.	Bloom and bar iron.	Castings and ironware.	Domestic woolens.	Domestic salt.	Foreign salt.
Albany	......	13	67	2,302	151	206	165	25	143
West Troy	3	....	......	4,920	937	639	......	1,915	737
Waterford	......	....	......	822	......	137	......	172	2,026
Total	3	13	67	8,044	1,088	982	165	2,112	2,906

Annual statement of through freight going west — (Continued).

OFFICES.	MERCHANDISE.						
	Sugar.	Molasses.	Coffee.	Nails, spikes and horseshoes.	Iron and steel.	Railroad iron.	All other merchandise.
Albany	108	108	188	368	3,381	....	28,893
West Troy	346	357	....	34	1,667	374	90,732
Waterford	361	110	....	400	960	150	6,828
Total	815	575	188	802	6,008	524	126,453

Annual statement of through freight going west — (Concluded).

OFFICES.	OTHER ARTICLES.							Total tons.
	Stone, lime and clay.	Rock and superphosphates.	Anthracite coal.	Bituminous coal.	Petroleum.	Iron ore.	Sundries.	
Albany	32,819	2,555	9,588	......	212	......	532	86,780
West Troy	133,260	5,836	110,055	2,183	......	8	7,241	362,967
Waterford	12,984	......	124,787	3,103	11	......	170	158,645
Total	179,063	8,391	244,430	5,286	223	8	7,943	608,392

ANNUAL STATEMENT *showing total tons of through freight going east and west during the season of* 1892.

OFFICES.	THE FOREST — PRODUCT OF WOOD.						
	Boards and scantling.	Shingles.	Timber.	Staves.	Wood.	Ashes, pot and pearl.	Ashes, leached.
Albany	772	....	160	....	....	2,285	17
West Troy	159	....	240	....	....	....	....
Tonawanda	435,370	320	2,830	....	....	....	....
Buffalo	35,974	12	....	....	....	....	400
Waterford	660	....	2,900	....	....	....	....
Whitehall	175,470	17	....	60	18,340	....	....
Oswego	39,192	98	....	....	....	....	1,432
Boonville	67,655	....	8,928	....	178	....	....
Total	755,252	447	15,058	60	18,518	2,285	1,849

Annual statement of through freight going east and west — (Continued).

OFFICES.	AGRICULTURE — PRODUCT OF ANIMALS.			AGRICULTURE — VEGETABLE FOOD.					
	Pork.	Lard, tallow and lard oil.	Hides.	Flour.	Wheat.	Rye.	Corn.	Barley.	Barley malt.
Albany	....	166	....	......	....	......	....	446	136
West Troy	....	......	60	......	....	......	....	776	178
Tonawanda	...	......	....	......	....	......	....	......	....
Buffalo	....	......	....	2,344	515,103	3,997	118,751	25,447	2,674
Waterford	20	......	....	23	....	......	....	......	....
Whitehall	....	......	....	......	....	......	....	......	....
Oswego	....	......	....	......	2,146	199	289	4,976	1,824
Boonville	....	......	....	......	....	......	....	......	....
Total	20	166	60	2,367	517,249	4,196	119,040	31,645	4,812

Annual statement of through freight going east and west — (Continued).

OFFICES.	AGRICULTURE — VEGETABLE FOOD.					ALL OTHER AGRICULTURAL PRODUCTS.		
	Oats.	Peas and beans.	Apples.	Potatoes.	Dried fruit.	Hemp.	Clover and grass seed.	Flax seed.
Albany	....	97	......	......	40	730	107	....
West Troy	....	......	......	......	128	45	137	....
Tonawanda	....	......	......	......	......	....	....	....
Buffalo	67,609	......	......	......	......	....	....	99,345
Waterford	5	2,016	......	......	......	....	....	....
Whitehall	671	......	801	1,389	......	....	....	....
Oswego	....	472	......	......	......	....	....	....
Boonville	....	......	......	1,176	......	....	....	....
Total	68,285	2,585	801	2,565	168	775	244	99,345

Annual statement of through freight going east and west — (Continued).

OFFICES.	MANUFACTURES.								
	Domestic spirits.	Leather.	Bar and pig lead.	Pig iron.	Bloom and bar iron.	Castings and ironware.	Domestic woolens.	Domestic salt.	Foreign salt.
Albany	......	13	67	2,302	151	206	165	25	143
West Troy	3	......	......	4,920	937	639	......	1,915	737
Tonawanda	......	......	......	805	......	......	......	......	....
Buffalo	......	......	......	5,232	90	......	......	......	....
Waterford	......	......	......	822	......	137	......	172	2,026
Whitehall	......	......	......	5,238	678	1	......	......	....
Oswego	......	......	......	......	......	......	......	......	....
Boonville	......	......	......	......	......	......	......	......	....
Total	3	13	67	19,319	1,856	983	165	2,112	2,906

Annual statement of through freight going east and west — (Continued).

OFFICES.	MERCHANDISE.							OTHER ARTICLES.	
	Sugar.	Molasses.	Coffee.	Nails, spikes and horseshoes.	Iron and steel.	Railroad iron.	All other merchandise.	Stone, lime and clay.	Copper ore.
Albany	108	108	188	368	3,381	......	28,893	32,819	.....
West Troy	346	357	....	34	1,667	374	90,732	133,260	.....
Tonawanda	....	......	....	....	......	......	....	....	.....
Buffalo	....	......	....	....	......	......	....	1,702	201
Waterford	361	110	....	400	960	150	6,828	12,984	.....
Whitehall	....	......	....	90	40	......	110	820	.....
Oswego	....	......	....	....	......	......	....	....	.....
Boonville	....	......	....	....	......	......	75	....	.....
Total	815	575	188	892	6,048	524	126,638	181,585	201

Annual statement of through freight going east and west — (Concluded).

OFFICES.	OTHER ARTICLES.						Total tons.
	Rock and superphosphates.	Anthracite coal.	Bituminous coal.	Petroleum.	Iron ore.	Sundries.	
Albany	2,555	9,588	....	212	....	532	86,780
West Troy	5,836	110,055	2,183	....	8	7,241	362,967
Tonawanda	....	....	....	....	....	....	439,325
Buffalo	....	1,452	....	9,774	....	274	890,381
Waterford	....	124,787	3,103	11	....	170	158,645
Whitehall	....	....	....	....	133,753	3,612	341,090
Oswego	....	....	....	....	....	30	50,658
Boonville	....	....	....	....	....	....	78,012
Total	8,391	245,882	5,286	9,997	133,761	11,859	2,407,858

ANNUAL STATEMENT *showing total tons cleared on all canals during the season of* 1892.

OFFICES.	THE FOREST — PRODUCT OF WOOD.						
	Boards and scantling.	Shingles.	Timber.	Staves.	Wood.	Ashes, pot and pearl.	Ashes, leached.
Albany	12,671	....	540	....	2,447	17	....
West Troy	15,166	....	5,333	....	6,425	....	....
Syracuse	3,122	8	149	66	8,327	4,891	....
Rochester	105	....	....	709	4,304	....	....
Tonawanda	477,215	1,333	7,216	100	330	....	....
Buffalo	63,615	65	40	7,210	....	....	400
Waterford	160,679	....	3,815	....	31,055	....	....
Whitehall	175,698	17	182	....	69,565	....	....
Oswego	55,432	493	....	247	6,849	....	1,672
Geneva	684	....	....	....	....	....	....
Boonville	86,356	....	8,928	....	14,238	....	....
Rome	8,368	....	2,750	30	2,076	....	....
Total	1,059,111	1,916	28,953	8,362	145,616	4,908	2,072

Annual statement of total tons cleared — (Continued).

OFFICES.	PRODUCT OF ANIMALS.					AGRICULTURE — VEGETABLE FOOD.			
	Pork.	Cheese.	Butter.	Lard, tallow and lard oil.	Hides.	Flour.	Wheat.	Rye.	Corn.
Albany	....	....	....	166	....	59	1	......	1,167
West Troy	3	1	....	......	60	7	31	......	....
Syracuse	8	....	9	5	22	1,198	3,462	......	100
Rochester	....	....	....	......	....	......	1,715	......	232
Tonawanda	....	....	....	......	....	......	....	......	....
Buffalo	....	....	....	.....	....	2,485	611,177	3,997	141,506
Waterford	20	....	....	......	....	99	....	59	....
Whitehall	....	....	....	......	....	......	....	......	....
Oswego	....	....	....	5	....	273	4,806	199	5,657
Geneva	....	....	....	......	....	......	....	......	....
Boonville	7	....	....	......	....	35	....	......	605
Rome	....	....	....	......	....	......	....	......	9
Total	38	1	9	176	82	4,156	621,192	4,255	149,276

Annual statement of total tons cleared — (Continued).

OFFICES.	AGRICULTURE — VEGETABLE FOOD.								
	Corn meal.	Barley.	Barley malt.	Oats.	Bran and shipstuffs.	Peas and beans.	Apples.	Potatoes.	Dried fruit.
Albany	......	446	136	893	234	98	......	......	40
West Troy	4,796	776	1,138	249	......	......	137	......	128
Syracuse	......	288	1,639	16	1,263	......	693	1,068	......
Rochester	......	7,240	785	......	44	......	4,246	......	......
Tonawanda	......	......	......	......	......	......	4	......	......
Buffalo	......	37,570	2,674	70,363	798	......	......	......	......
Waterford	......	......	......	5	10	2,016	1,461	4,464	......
Whitehall	......	......	......	673	......	......	801	1,389	......
Oswego	......	5,283	1,824	......	44	472	......	......	......
Geneva	......	......	214	......	......	......	......	......	......
Boonville	......	......	......	58	26	......	2	1,176	......
Rome	......	......	......	......	......	......	......	......	......
Total	4,796	51,603	8,410	72,257	2,419	2,586	7,344	8,097	168

Annual statement of total tons cleared — (Continued).

OFFICES.	ALL OTHER AGRICULTURAL PRODUCTS.			MANUFACTURES.				
	Hemp.	Clover and grass seed.	Flax seed.	Domestic spirits.	Leather.	Furniture.	Bar and pig lead.	Pig iron.
Albany	730	123	....	......	13	1	67	2,959
West Troy	45	137	....	3	......	10	......	10,488
Syracuse	....	....	....	......	......	......	......	125
Rochester	....	....	....	......	......	......	......	232
Tonawanda	....	....	....	18	......	......	......	1,055
Buffalo	....	....	99,345	......	......	......	......	5,891
Waterford	....	....	....	5	......	......	......	822
Whitehall	....	....	....	......	......	......	......	5,238
Oswego	....	....	....	35	......	......	......	....
Geneva	....	....	....	......	......	......	......	....
Boonville	....	....	....	3	......	1	......	....
Rome	....	....	....	......	......	.....	......	....
Total	775	260	99,345	64	13	12	67	26,810

Annual statement of total tons cleared — (Continued).

OFFICES.	MANUFACTURES.					MERCHANDISE.		
	Bloom and bar iron.	Castings and ironware.	Domestic woolens.	Domestic salt.	Foreign salt.	Sugar.	Molasses.	Coffee.
Albany	263	631	241	48	214	1,314	173	198
West Troy	1,052	737	......	1,915	910	663	359	....
Syracuse	......	....	......	75,437	....	70	......	....
Rochester	......	54	......	12,290	....	....	......	....
Tonawanda	......	....	......	....	....	....	......	....
Buffalo	......	90	......	....	....	....	......	....
Waterford	......	397	......	172	2,026	361	110	....
Whitehall	678	1	......	....	....	....	......	....
Oswego	......	....	......	....	....	....	......	....
Geneva	......	....	......	....	....	....	......	....
Boonville	......	....	......	12	....	25	......	....
Rome	......	420	......	1	....	....	1	....
Total	1,993	2,330	241	89,875	3,150	2,433	643	198

Annual statement of total tons cleared — (Continued).

OFFICES.	MERCHANDISE.					OTHER ARTICLES.	
	Nails, spikes and horseshoes.	Iron and steel.	Railroad iron.	Flint, enamel, crockery and glassware.	All other merchandise.	Stone, lime and clay.	Copper ore.
Albany	368	3,696	....	38	32,236	55,491	....
West Troy	56	1,944	374	22	153,847	191,222	....
Syracuse	....	75	....	63	27,444	79,212	....
Rochester	....	....	....	209	23,570	30,050	....
Tonawanda	....	....	....	....	6,700	87,985	....
Buffalo	....	....	....	....	7,130	4,812	201
Waterford	400	960	150	....	18,272	57,795	....
Whitehall	90	40	....	....	110	2,038	....
Oswego	....	....	....	....	113	3,450	....
Geneva	....	....	....	....	....	21,439	....
Boonville	7	6	....	....	484	820	....
Rome	....	....	....	....	3,807	2,609	....
Total	921	6,721	524	332	273,713	536,923	201

Annual statement of total tons cleared — (Concluded).

OFFICES.	OTHER ARTICLES.						Total tons.
	Rock and superphosphates.	Anthracite coal.	Bituminous coal.	Petroleum.	Iron ore.	Sundries.	
Albany	7,963	44,264	....	566	....	532	171,044
West Troy	9,872	249,106	3,622	....	2,848	9,668	673,150
Syracuse	188	213,189	5,426	248	....	2,161	429,972
Rochester	212	29,129	2,443	....	....	567	118,136
Tonawanda	....	....	....	....	....	2,256	584,212
Buffalo	....	....	29,215	9,786	....	1,948	1,100,318
Waterford	....	167,222	3,237	11	....	204	455,827
Whitehall	....	....	....	....	133,753	3,747	394,020
Oswego	....	2,154	1,753	....	....	125	90,886
Geneva	....	8,462	44,610	....	....	260	75,669
Boonville	....	1,901	780	....	....	....	115,470
Rome	....	3,107	798	....	....	....	23,976
Total	18,235	718,534	91,884	10,611	136,601	21,468	4,232,680

ANNUAL STATEMENT *of property in tons left at tide water from the Champlain canal during the season of* 1892.

OFFICES.	THE FOREST—PRODUCT OF WOOD.					AGRICULTURE—VEGETABLE FOOD.				
	Boards and scantling.	Shingles.	Timber.	Staves.	Wood.	Flour.	Wheat.	Rye.	Corn.	Oats.
Albany	65,928	....	......	....	823	....	....	....	......	....
Albany through to New York..	24,325	....	......	....	204	....	....	....	......	....
West Troy and New York	122,425	....	1,020	....	34,457	55	....	59	......	488
Waterford	104,138	8	1,300	60	33,430	97	1	....	1,069	1,373
Total..................	316,816	8	2,320	60	68,914	152	1	59	1,069	1,861

Annual statement of property left at tide-water — (Continued).

OFFICES.	AGRICULTURE — VEGETABLE FOOD,			MANUFACTURES.				
	Bran and shipstuffs.	Apples.	Potatoes.	Domestic spirits.	Pig iron.	Bloom and bar iron.	Castings and ironware.	Foreign salt.
Albany	....	....	....	......	......	......	....	....
Albany through to New York..	....	......	....	......	......	......	....	....
West Troy and New York.....	....	109	....	......	3,741	498	1	....
Waterford	248	5,832	3,995	5	2,436	182	260	88
Total	248	5,941	3,995	5	6,177	680	261	88

Annual statement of property left at tide-water — (Concluded).

OFFICES.	MERCHANDISE.		OTHER ARTICLES.					Total tons.
	Nails, spikes and horseshoes.	All other merchandise.	Stone, lime and clay.	Anthracite coal.	Bituminous coal.	Iron ore.	Sundries.	
Albany	....	....	741	......	......	140	......	67,632
Albany through to New York ..	....	....	707	......	......	2,083	......	27,319
West Troy to New York.......	40	4,658	36,708	3,861	......	100,532	1,026	309,678
Waterford	90	12,544	10,723	57,972	1,081	29,192	1,378	267,502
Total	130	17,202	48,879	61,833	1,081	131,947	2,404	672,131

ANNUAL STATEMENT *showing property in tons left at tide-water from Erie canal during the season of* 1892.

OFFICES.	THE FOREST — PRODUCT OF WOOD.					AGRICULTURE — PRODUCT OF ANIMALS.		AGRICULTURE — VEGETABLE FOOD.	
	Boards and scantling.	Shingles.	Timber.	Wood.	Ashes, pot and pearl.	Pork.	Cheese.	Flour.	Wheat.
Albany, through	288,087	146	......	......	......	...	......	......	....
Through Albany to New York..	115,188	54	......	......	......	....	......	1,409	165,691
Way, Albany to New York....	668	....	......	......	940	4	......	......	....
West Troy to New York......	79,889	....	10,920	6,204	1,466	....	1	853	352,333
Total	483,832	200	10,920	6,204	2,406	4	1	2,262	518,024

Annual statement of property left at tide-water — (Continued).

OFFICES.	AGRICULTURE — VEGETABLE FOOD.								
	Rye.	Corn.	Corn meal.	Barley.	Barley malt.	Oats.	Peas and beans.	Apples.	Potatoes.
Albany, through	......	2,934	......	1,890	405	......	9	......	....
Through Albany to New York	2,360	31,319	......	4,995	495	15,439	....	......	....
Way, Albany to New York	......	234	......	703	1,002	......	....	......	210
West Troy to New York	1,394	78,738	4,083	18,532	9,683	47,167	....	3,185	1,565
Total	3,754	113,225	4,083	26,120	11,585	62,606	9	3,185	1,775

ANNUAL STATEMENT *of total tons of property left at tide-water from all canals during the season of* 1892.

OFFICES.	THE FOREST—PRODUCT OF WOOD.						
	Boards and scantling.	Shingles.	Timber.	Staves.	Wood.	Ashes, pot and pearl.	Ashes, leached.
Albany	578,273	310	....	....	2,993	940	476
West Troy	213,964	39	18,470	....	40,689	2,346	....
Waterford	104,138	8	1,300	60	33,430	....	....
Total	896,375	357	19,770	60	77,112	3,286	476

Annual statement of property left at tide-water from all canals — (Continued).

OFFICES.	AGRICULTURE — PRODUCT OF ANIMALS.		AGRICULTURE — VEGETABLE FOOD.					
	Pork.	Cheese.	Flour.	Wheat.	Rye.	Corn.	Corn meal.	Barley.
Albany	4	....	1,842	166,461	2,360	34,776	......	8,411
West Troy	....	1	908	353,416	1,652	78,738	4,083	22,685
Waterford	....	....	......	....	......	....	......	....
Total	4	1	2,750	519,877	4,012	113,514	4,083	31,096

Annual statement of property left at tide-water from all canals — (Continued).

OFFICES.	AGRICULTURE — VEGETABLE FOOD.					All other agricultural products—flaxseed.	MANUFACTURES.			
	Barley malt.	Oats.	Peas and beans.	Apples.	Potatoes.		Furniture.	Pig iron.	Bloom and bar iron.	Castings and ironware.
Albany	3,755	15,439	243	......	487	33,202	....	8,960	....	....
West Troy	9,859	47,655	238	3,294	2,468	63,980	10	9,218	498	54
Waterford	......	174	....	5,832	3,995	....	....	2,436	182	....
Total	13,614	63,268	481	9,126	6,950	97,182	10	20,614	680	54

Annual statement of property left at tide-water from all canals — (Continued).

OFFICES.	MANUFACTURES.		MERCHANDISE.				
	Domestic salt.	Foreign salt.	Molasses.	Nails, spikes and horseshoes.	Iron and steel.	Flint, enamel, crockery and glassware.	All other merchandise.
Albany	20,698	....	......	....	....	8	1,387
West Troy	29,307	17	1	62	224	22	50,083
Waterford	....	....	......	90	....	....	2,069
Total	50,005	17	1	152	224	30	53,539

Annual statement of property left at tide-water from all canals — (Concluded).

OFFICES.	OTHER ARTICLES.						Total tons.
	Stone, lime and clay.	Anthracite coal.	Bituminous coal.	Petroleum.	Iron ore.	Sundries.	
Albany	8,405	19,988	479	3,273	2,223	307	915,700
West Troy	90,430	72,763	676	5,865	100,532	1,750	1,225,997
Waterford	10,723	....	....	....	29,192	1,193	194,822
Total	109,558	92,751	1,155	9,138	131,947	3,250	2,336,519

ANNUAL STATEMENT *showing tons of property that went to New York from the Erie canal during the season of* 1892.

OFFICES.	THE FOREST — PRODUCT OF WOOD.					AGRICULTURE — VEGETABLE FOOD.	
	Boards and scantling.	Shingles.	Timber.	Wood.	Ashes, pot and pearl.	Flour.	Wheat.
Albany	115,188	54	....	....	....	1,409	165,691
West Troy	70,854	....	3,088	3,900	1,466	848	352,333
Total	186,042	54	3,088	3,900	1,466	2,257	518,024

Annual statement of property that went to New York from the Erie canal—(Continued).

OFFICES.	AGRICULTURE—VEGETABLE FOOD.					
	Rye.	Corn.	Corn meal.	Barley.	Barley malt.	Oats.
Albany	2,360	31,319	....	4,995	495	15,439
West Troy	1,394	78,408	605	18,052	8,433	47,167
Total	3,754	109,727	605	23,047	8,928	62,606

Annual statement of property that went to New York from the Erie canal — (Continued).

OFFICES.	AGRICULTURE — VEGETABLE FOOD.		All other agricultural products — flaxseed.	MANUFACTURES.			All other merchandise.
	Apples.	Potatoes.		Pig iron.	Castings and ironware.	Domestic salt.	
Albany	....	....	33,202	8,960	....	....	....
West Troy	3,185	1,565	63,980	5,477	53	18,771	40,929
Total	3,185	1,565	97,182	14,437	53	18,771	40,929

Annual statement of property that went to New York from the Erie canal — (Concluded).

OFFICES.	OTHER ARTICLES.					Total tons.
	Stone, lime and clay.	Anthracite coal.	Bituminous coal.	Petroleum.	Sundries.	
Albany	455	....	479	3,273	....	383,319
West Troy	31,804	5,565	676	5,865	425	764,843
Total	32,259	5,565	1,155	9,138	425	1,148,162

ANNUAL STATEMENT *showing tons of property that went to New York via Champlain canal during the season of* 1892.

OFFICES.	THE FOREST — PRODUCT OF WOOD.					AGRICULTURE — VEGETABLE FOOD.	
	Boards and scantling.	Shingles.	Timber.	Staves.	Wood.	Flour.	Rye.
Albany	24,325	....	....	....	204	....	....
West Troy	122,425	....	1,020	....	34,457	55	59
Waterford	104,138	8	1,300	60	33,430	....	....
Total	250,888	8	2,320	60	68,091	55	59

Annual statement of property that went to New York via Champlain canal—(Continued).

OFFICES.	AGRICULTURE — VEGETABLE FOOD.			MANUFACTURES.		
	Oats.	Apples.	Potatoes.	Pig iron.	Bloom and bar iron.	Castings and ironware.
Albany	....	....	....	....	....	....
West Troy	488	109	....	3,741	498	1
Waterford	174	5,832	3,995	2,436	182	....
Total	662	5,941	3,995	6,177	680	1

Annual statement of property that went to New York via Champlain canal — (Concluded).

OFFICES.	MERCHANDISE.		OTHER ARTICLES.				Total tons.
	Nails, spikes and horseshoes.	All other merchandise.	Stone, lime and clay.	Anthracite coal.	Iron ore.	Sundries.	
Albany	....	....	707	....	2,083	....	27,319
West Troy	40	4,658	36,708	3,861	100,532	1,026	309,678
Waterford	90	2,069	10,723	....	29,192	1,193	194,822
Total	130	6,727	48,138	3,861	131,807	2,219	531,819

ANNUAL STATEMENT *showing value of all the property left at tide-water during the season of* 1892.

OFFICES.	THE FOREST—PRODUCT OF WOOD.						
	Boards and scantling.	Shingles.	Timber.	Staves.	Wood.	Ashes, pot and pearl.	Ashes, leached.
Albany	$9,373,968	$8,038	....	....	$4,276	$95,450	$3,173
West Troy	3,454,106	133	$247,345	....	57,984	213,325	....
Waterford	1,687,030	211	1,755	$2,400	47,756	....	....
Total	$14,515,104	$8,382	$249,100	$2,400	$110,016	$308,775	$3,173

Annual statement showing value of all the property left at tide-water — (Continued).

OFFICES.	AGRICULTURE—PRODUCT OF ANIMALS.		AGRICULTURE — VEGETABLE FOOD.					
	Pork.	Cheese.	Flour.	Wheat.	Rye.	Corn.	Corn meal.	Barley.
Albany..................	$322	......	$106,544	$5,659,693	$53,103	$683,064	....	$243,924
West Troy...............	....	$180	113,466	12,015,983	37,121	$1,544,685	$103,958	718,281
Waterford..............	....	......	5,625	35	......	20,996	....	....
Total................	$322	$180	$225,635	$17,675,711	$90,224	$2,248,745	$103,958	$962,205

Annual statement showing value of all the property left at tide-water — (Continued).

OFFICES.	AGRICULTURE — VEGETABLE FOOD.						All other agricultural products — flaxseed.
	Barley malt.	Oats.	Bran and ship stuffs.	Peas and beans.	Apples.	Potatoes.	
Albany	$194,323	$434,227	....	$22,267	....	$10,550	$1,826,106
West Troy	534,387	1,340,305	....	21,791	$15,806	107,019	3,518,922
Waterford	....	38,630	$4,462	....	287,470	86,554	....
Total	$728,710	$1,813,162	$4,462	$44,058	$303,276	$204,123	$5,345,028

Annual statement showing value of all the property left at tide-water — (Continued).

OFFICES.	MANUFACTURES.						
	Domestic spirits.	Furniture.	Pig iron.	Bloom and bar iron.	Castings and ironware.	Domestic salt.	Foreign salt.
Albany	....	....	$16,128	....	....	$137,983	....
West Troy	....	$5,040	165,919	$14,952	$2,160	204,141	$336
Waterford	$1,620	....	43,850	5,454	10,398	....	1,750
Total	$1,620	$5,040	$225,897	$20,406	$12,558	$342,124	$2,086

Annual statement showing value of all the property left at tide-water — (Continued).

OFFICES.	MERCHANDISE.				
	Molasses.	Nails, spikes and horseshoes.	Iron and steel.	Flint, enamel, crockery and glassware.	All other merchandise.
Albany	....	....	....	$3,750	$554,785
West Troy	$25	$3,120	$8,960	11,200	20,032,694
Waterford	....	4,500	....	....	4,272,698
Total	$25	$7,620	$8,960	$14,950	$24,860,177

Annual statement showing value of all the property left at tide-water — (Concluded).

OFFICES.	OTHER ARTICLES.						Total value.
	Stone, lime and clay.	Anthracite coal.	Bituminous coal.	Petroleum.	Iron ore.	Sundries.	
Albany	$21,013	$99,939	$1,436	$84,155	$22,232	$61,430	$19,721,879
West Troy	226,085	356,115	2,028	131,962	1,005,319	349,912	46,564,765
Waterford	26,808	290,860	3,243	....	291,918	275,628	7,411,651
Total	$273,906	$746,914	$6,707	$216,117	$1,319,469	$686,970	$73,698,295

ANNUAL STATEMENT *showing property in tons that went to New York during the season of* 1892.

OFFICES.	THE FOREST—PRODUCT OF WOOD.						
	Boards and scantling.	Shingles.	Timber.	Staves.	Wood.	Ashes, pot and pearl.	Ashes, leached.
Albany	157,605	131	....	....	204	....	476
West Troy	172,324	39	5,048	....	23,744	2,346	....
Albany, Erie way, to New York	668	....	....	....	....	940	....
Waterford	97,806	8	....	60	10,156	....	....
Total	428,403	178	5,048	60	34,104	3,286	476

Annual statement showing property that went to New York — (Continued).

OFFICES.	Agriculture-product of animals — pork.	AGRICULTURE — VEGETABLE FOOD.					
		Flour.	Wheat.	Rye.	Corn.	Corn meal.	Barley.
Albany	....	1,842	166,461	2,360	31,608	....	5,818
West Troy	....	848	353,416	1,593	78,408	605	22,205
Albany, Erie way, to New York	4	....	....	....	234	....	703
Waterford	....	....	....	....	....	....	....
Total	4	2,690	519,877	3,953	110,250	605	28,726

Annual statement showing property that went to New York — (Continued).

OFFICES.	AGRICULTURE — VEGETABLE FOOD.					All other agricultural products — flaxseed.
	Barley malt.	Oats.	Peas and beans.	Apples.	Potatoes.	
Albany	2,132	15,439	234	....	277	33,202
West Troy	8,609	47,655	238	3,185	2,285	63,980
Albany, Erie way, to New York	1,002	....	....	....	210	....
Waterford	....	174	....	3,567	202	....
Total	11,743	63,268	472	6,752	2,974	97,182

Annual statement showing property that went to New York — (Continued).

OFFICES.	MANUFACTURES.				MERCHANDISE.	
	Pig iron.	Bloom and bar iron.	Castings and ironware.	Domestic salt.	Nails, spikes and horseshoes.	All other merchandise.
Albany	8,960	....	....	....	....	....
West Troy	8,417	498	54	18,771	40	43,927
Albany, Erie way, to New York	....	....	....	19,399	....	665
Waterford	1,322	179	....	....	90	2,069
Total	18,699	677	54	38,170	130	46,661

Annual statement showing property that went to New York — (Concluded).

OFFICES.	OTHER ARTICLES.						Total tons.
	Stone, lime and clay.	Anthracite coal.	Bituminous coal.	Petroleum.	Iron ore.	Sundries.	
Albany	1,162	....	479	3,273	2,083	....	433,746
West Troy	60,289	5,565	676	5,865	97,028	1,397	1,029,055
Albany, Erie way, to New York	3,419	....	....	....	....	6	27,250
Waterford	786	....	....	....	29,192	1,193	146,804
Total	65,656	5,565	1,155	9,138	128,303	2,596	1,636,855

ANNUAL STATEMENT *showing tons of property left at and between offices during the season of* 1892.

OFFICES.	THE FOREST — PRODUCT OF WOOD.						
	Boards and scantling.	Shingles.	Timber.	Staves.	Wood.	Ashes, pot and pearl.	Ashes, leached.
Albany	578,273	310	....	....	2,993	940	476
West Troy	213,964	39	18,470	....	40,689	2,346	....
Syracuse	59,664	1,012	131	430	17,635	18	....
Rochester	57,301	359	2,420	2,547	3,970	370	....
Tonawanda	5,917	....	....	4,004	....	....	....
Buffalo	1,963	....	217	....	....	332	....
Waterford	104,138	8	1,300	60	33,430	....	....
Whitehall	540	....	....	....	....	....	....
Oswego	1,734	2	60	....	....	....	....
Geneva	354	....	....	....	....	....	....
Boonville	138	....	....	....	276	....	....
Rome	5,791	3	....	....	3,791	....	....
Total	1,029,777	1,733	22,598	7,041	102,784	4,006	476

Annual statement showing tons of property left at and between offices — (Continued).

OFFICES.	AGRICULTURE — PRODUCT OF ANIMALS.							AGRICULTURE — VEGETABLE FOOD.		
	Pork.	Beef.	Cheese.	Butter.	Lard, tallow and lard oil.	Wool.	Hides.	Flour.	Wheat.	Rye.
Albany	4	....	....	....	......	......	....	1,842	166,461	2,360
West Troy	....	....	1	....	......	......	....	908	353,416	1,652
Syracuse	4	38	1	9	5	......	15	1,551	22,835	......
Rochester	....	....	....	....	......	......	....	......	70,442	......
Tonawanda	....	....	....	....	......	......	....	696	8,423	......
Buffalo	....	....	....	....	......	......	60	......	216	......
Waterford	....	....	....	....	......	......	....	97	1	......
Whitehall	20	....	....	....	......	......	....	23	....	......
Oswego	....	....	....	....	......	73	....	30	1,070	......
Geneva	....	....	....	....	......	......	....	......	1,914	......
Boonville	7	....	....	....	......	......	....	117	....	......
Rome	....	....	....	....	......	......	....	15	4,800	......
Total	35	38	2	9	5	73	75	5,279	629,578	4,012

Annual statement showing tons of property left at and between offices — (Continued).

OFFICES.	AGRICULTURE — VEGETABLE FOOD.									
	Corn.	Corn meal.	Barley.	Barley malt.	Oats.	Bran and shipstuffs.	Peas and beans.	Apples.	Potatoes.	Dried fruit.
Albany	34,776	......	8,411	3,755	15,439	......	243	.....	487	....
West Troy	78,738	4,083	22,685	9,859	47,655	......	238	3,294	2,468	....
Syracuse	20,409	......	3,239	......	2,344	1,331	.....	228	3	....
Rochester	426	......	9,298	332	......	......	.....	153	.....	....
Tonawanda	....	......	......	......	......	438	.....	270	.....	....
Buffalo	....	......	730	......	2	......	.....	2	.....	155
Waterford	1,069	......	......	......	1,373	248	.....	5,832	3,995	....
Whitehall	....	......	......	......	......	......	2,016	.....	.....	....
Oswego	1,400	......	303	325	......	7	.....	44	.....	....
Geneva	....	......	......	......	......	......	.....	.....	....	....
Boonville	695	......	......	......	63	429	.....	20	.....	....
Rome	1,022	......	7	......	416	92	.....	.....	.....	....
Total	138,535	4,083	44,673	14,271	67,292	2,545	2,497	9,843	6,953	155

Annual statement showing tons of property left at and between offices — (Continued).

OFFICES.	ALL OTHER AGRICULTURAL PRODUCTS.			MANUFACTURES.			
	Hemp.	Clover and grass seed.	Flaxseed.	Domestic spirits.	Oil meal and cake.	Leather.	Furniture.
Albany	....	....	33,202	....	....	....	....
West Troy	....	....	63,980	....	....	....	10
Syracuse	....	....	....	....	....	....	5
Rochester	....	....	....	....	....	....	....
Tonawanda	....	....	....	....	....	....	....
Buffalo	952	22	22	44	....	13	....
Waterford	....	....	....	5	....	....	....
Whitehall	....	....	....	3	....	....	....
Oswego	....	....	....	....	....	....	....
Geneva	....	....	....	....	....	....	....
Boonville	....	....	....	4	4	....	1
Rome	....	....	....	....	....	....	....
Total	952	22	97,204	56	4	13	16

Annual statement showing tons of property left at and between offices — (Continued).

OFFICES.	MANUFACTURES.					
	Pig iron.	Bloom and bar iron.	Castings and ironware.	Domestic woolens.	Domestic salt.	Foreign salt.
Albany	8,960	....	....	....	20,698	....
West Troy	9,218	498	54	....	29,307	17
Syracuse	1,833	....	....	....	29,895	35
Rochester	246	....	....	....	25	....
Tonawanda	....	....	....	....	....	....
Buffalo	6,500	252	413	165	2,047	600
Waterford	2,436	182	260	....	....	88
Whitehall	1,323	....	1,821	....	2,936	1,349
Oswego	....	....	8	....	455	....
Geneva	....	....	....	....	483	....
Boonville	....	....	10	....	387	....
Rome	2,874	....	200	....	....	....
Total	33,390	932	2,766	165	86,233	2,089

Annual statement showing tons of property left at and between offices — (Continued).

OFFICES.	MERCHANDISE.							
	Sugar.	Molasses.	Coffee.	Nails, spikes and horseshoes.	Iron and steel.	Railroad iron.	Flint, enamel, crockery and glassware.	All other merchandise.
Albany	.....	.....	.....	....	....	....	8	1,387
West Troy	.....	1	.....	62	224	....	22	50,083
Syracuse	1,355	34	.....	....	344	....	46	22,579
Rochester	15	.....	.....	....	123	....	....	23,871
Tonawanda	.....	.....	.....	....	....	....	....	6,283
Buffalo	165	570	183	408	3,817	1,055	77	103,735
Waterford	.....	.....	.....	90	....	....	....	12,544
Whitehall	336	90	.....	167	973	150	....	7,590
Oswego	.....	.....	.....	....	....	....	5	2,235
Geneva	.....	.....	.....	....	....	....	....	....
Boonville	25	.....	.....	7	6	....	....	507
Rome	5	.....	.....	....	....	....	....	4,370
Total	1,901	695	183	734	5,487	1,205	158	235,184

Annual statement showing tons of property left at and between offices — (Concluded).

OFFICES.	OTHER ARTICLES.							Total tons.
	Stone, lime and clay.	Rock and superphosphates.	Anthracite coal.	Bituminous coal.	Petroleum.	Iron ore.	Sundries.	
Albany	8,405	....	19,988	479	3,273	2,223	307	915,700
West Troy	90,430	....	72,763	676	5,865	100,532	1,750	1,225,997
Syracuse	90,372	8,092	213,507	48,909	236	2,195	2,092	552,431
Rochester	50,269	2,673	46,301	1,725	......	....	337	273,203
Tonawanda	28,095	....	227	1,148	......	....	575	56,076
Buffalo	228,730	7,181	54,760	......	54	....	41,215	456,657
Waterford	10,723	....	57,972	1,081	......	29,192	1,378	267,502
Whitehall	19,915	....	196,013	4,296	48	....	1,775	241,384
Oswego	13,711	6	7,081	1,806	50	....	85	30,490
Geneva	21,439	....	2,689	15,013	......	....	839	42,731
Boonville	848	....	2,773	1,682	......	....	......	7,999
Rome	1,517	....	3,341	3,695	......	745	......	32,684
Total	564,454	17,952	677,415	80,510	9,526	134,887	50,353	4,102,854

ANNUAL STATEMENT *showing total tons of property arriving at tide-water during the season of* 1892 (*including property that went to New York*).

OFFICES.	THE FOREST — PRODUCT OF WOOD.							AGRICULTURE — PRODUCT OF ANIMALS.	
	Boards and scantling.	Shingles.	Timber.	Staves.	Wood.	Ashes, pot and pearl.	Ashes leached.	Pork.	Cheese.
Albany	578,273	310	......	....	2,993	940	476	4	....
West Troy....................	213,964	39	18,470	....	40,689	2,346	......	......	1
Waterford	104,138	8	1,300	60	33,430	......	......	......	....
Total	896,375	357	19,770	60	77,112	3,286	476	4	1

Annual statement showing tons of property arriving at tide-water — (Continued).

OFFICES.	AGRICULTURE — VEGETABLE FOOD.							
	Flour.	Wheat.	Rye.	Corn.	Corn meal.	Barley.	Barley malt.	Oats.
Albany	1,842	166,461	2,360	34,776	......	8,411	3,755	15,439
West Troy	908	353,416	1,652	78,738	4,083	22,685	9,859	47,655
Waterford	97	1	......	1,069	......	......	......	1,373
Total	2,847	519,878	4,012	114,583	4,083	31,096	13,614	64,467

Annual statement showing tons of property arriving at tide-water — (Continued).

OFFICES.	AGRICULTURE — VEGETABLE FOOD.				All other agricultural products — flaxseed.	MANUFACTURES.		
	Bran and shipstuffs.	Peas and beans.	Apples.	Potatoes.		Domestic spirits.	Furniture.	Pig iron.
Albany	......	243	......	487	33,202	......	......	8,960
West Troy	.....	238	3,294	2,468	63,980	......	10	9,218
Waterford	248	......	5,832	3,995	....	5	......	2,436
Total	248	481	9,126	6,950	97,180	5	10	20,614

Annual statement showing tons of property arriving at tide-water — (Continued).

OFFICES.	MANUFACTURES.				MERCHANDISE.				
	Bloom and bar iron.	Castings and ironware.	Domestic salt.	Foreign salt.	Molasses.	Nails, spikes and horseshoes.	Iron and steel.	Flint, enamel, crockery and glassware.	All other merchandise.
Albany	......	......	20,698	......	......	....	....	8	1,387
West Troy	498	54	29,307	17	1	62	224	22	50,083
Waterford	182	260	......	88	......	90	....	....	12,544
Total	680	314	50,005	105	1	152	224	30	64,014

Annual statement showing tons of property arriving at tide-water — (Concluded).

OFFICES.	OTHER ARTICLES.						Total tons.
	Stone, lime and clay.	Anthracite coal.	Bituminous coal.	Petroleum.	Iron ore.	Sundries.	
Albany	8,405	19,988	479	3,273	2,223	307	915,700
West Troy	90,430	72,763	676	5,865	100,532	1,750	1,225,997
Waterford	10,723	57,972	1,081	....	29,192	1,378	267,502
Total	109,558	150,723	2,236	9,138	131,947	3,435	2,409,199

ANNUAL STATEMENT *showing value of all the property that went to New York from the Erie canal during the season of* 1892.

OFFICES.	THE FOREST — PRODUCT OF WOOD.					Agriculture—product of animals—pork.
	Boards and scantling.	Shingles.	Timber.	Wood.	Ashes, pot and pearl.	
Through Albany	$1,866,051	$1,398	....	....	....	....
Way of Albany	10,827	....	....	....	$95,450	$322
West Troy	1,145,724	....	$39,688	$5,572	133,325	....
Total	$3,022,602	$1,398	$39,688	$5,572	$228,775	$322

Annual statement showing value of all property that went to New York from the Erie canal—(Continued).

OFFICES.	AGRICULTURE—VEGETABLE FOOD.						
	Flour.	Wheat.	Rye.	Corn.	Corn meal.	Barley.	Barley malt.
Through Albany	$81,513	$5,633,502	$53,103	$615,189	....	$158,189	$25,626
Way of Albany	....	....	....	4,565	....	22,268	51,861
West Troy	109,984	11,979,158	31,320	1,540,175	$15,400	571,558	463,858
Total	$191,497	$17,612,660	$84,423	$2,159,929	$15,400	$752,015	$541,345

Annual statement showing value of all property that went to New York from the Erie canal — (Continued).

OFFICES.	AGRICULTURE — VEGETABLE FOOD.			All other agricultural products — flaxseed.	MANUFACTURES.		
	Oats.	Apples.	Potatoes.		Pig iron.	Castings and ironware.	Domestic salt.
Through Albany	$434,227	....	....	$1,826,106	$16,128	....	....
Way of Albany	....	....	$4,550	....	....	....	$129,324
West Troy	1,326,582	$14,865	87,454	3,518,922	98,585	$2,140	133,898
Total	$1,760,809	$14,865	$92,004	$5,345,028	$114,713	$2,140	$263,222

Annual statement showing value of all property that went to New York from the Erie canal — (Concluded).

OFFICES.	All other merchandise.	OTHER ARTICLES.					Total value.
		Stone, lime and clay.	Anthracite coal.	Bituminous coal.	Petroleum.	Sundries.	
Through Albany	....	$1,138	....	$1,436	$84,155	....	$10,797,761
Way of Albany	$265,940	8,547	....	....	....	$1,270	594,924
West Troy	16,371,636	79,509	$27,826	2,028	131,962	84,916	37,916,085
Total	$16,637,576	$89,194	$27,826	$3,464	$216,117	$86,186	$49,308,770

ANNUAL STATEMENT *showing value of all property that went to New York from the Champlain canal during the season of* 1892.

OFFICES.	THE FOREST — PRODUCT OF WOOD.				
	Boards and scantling.	Shingles.	Timber.	Staves.	Wood.
Albany	$394,065	....	....	....	$292
West Troy	1,522,395	....	$9,450	....	28,308
Waterford	1,687,030	$211	1,755	$2,400	47,756
Total	$3,603,490	$211	$11,205	$2,400	$76,356

Annual statement showing value of all property that went to New York from Champlain canal— (Continued).

OFFICES.	AGRICULTURE — VEGETABLE FOOD.			MANUFACTURES.		
	Oats.	Apples.	Potatoes.	Pig iron.	Bloom and bar iron.	Castings and ironware.
Albany	....	....	....	....	....	....
West Troy	$13,723	....	....	$52,920	$14,952	$20
Waterford	4,907	$287,470	$86,554	43,850	5,454	....
Total	$18,630	$287,470	$86,554	$96,770	$20,406	$20

Annual statement showing value of all property that went to New York from Champlain canal — (Continued).

OFFICES.	MERCHANDISE.		OTHER ARTICLES.			Total value.
	Nails, spikes and horseshoes.	All other merchandise.	Stone, lime and clay.	Iron ore.	Sundries.	
Albany	....	....	$1,762	$20,832	....	$416,951
West Troy	$2,000	$1,091,460	71,224	970,284	$194,468	3,971,204
Waterford	4,500	82,760	26,808	291,918	238,560	2,811,933
Total	$6,500	$1,174,220	$99,794	$1,283,034	$433,028	$7,200,088

ANNUAL STATEMENT *showing value of all the property carried on the canals during the season of* 1892.

OFFICES.	THE FOREST—PRODUCT OF WOOD.						
	Boards and scantling.	Shingles.	Timber.	Staves.	Wood.	Ashes, pot and pearl.	Ashes, leached.
Albany	$205,355	....	$7,290	....	....	$222,500	$112
West Troy	245,673	....	111,699	....	$9,180	....	....
Syracuse	50,580	$212	2,009	$2,625	11,896	444,125	....
Rochester	1,755	....	....	9,844	6,148	....	....
Tonawanda	7,730,891	34,668	97,420	4,000	660	....	....
Buffalo	1,030,575	1,674	540	288,390	....	....	2,666
Waterford	2,603,003	....	40,385	....	44,364	....	....
Whitehall	2,846,305	229	24,570	....	99,484	....	....
Oswego	898,013	12,809	....	9,889	9,784	....	11,146
Geneva	12,312	....	....	....	....	....	....
Boonville	1,165,821	....	100,440	....	28,476	....	....
Rome	135,556	....	1,836	1,219	2,880	....	....
Total	$16,925,839	$49,592	$386,189	$315,967	$212,872	$666,625	$13,924

Annual statement showing value of all the property carried on the canals — (Continued).

OFFICES.	AGRICULTURE — PRODUCT OF ANIMALS.					AGRICULTURE — VEGETABLE FOOD.	
	Pork.	Cheese.	Butter.	Lard, tallow and lard oil.	Hides.	Flour.	Wheat.
Albany	....	....	....	$26,522	....	$3,437	$35
West Troy	$280	$180	....	....	$6,300	438	1,063
Syracuse	672	....	$3,600	720	2,310	69,357	117,690
Rochester	....	....	....	....	....	....	58,315
Tonawanda	....	....	....	....	....	....	....
Buffalo	....	....	....	....	....	174,781	20,780,027
Waterford	1,750	....	....	....	....	5,750	....
Whitehall	....	....	....	....	....	....	....
Oswego	....	....	....	800	....	15,781	163,390
Geneva	....	....	....	....	....	....	....
Boonville	658	....	....	....	....	2,175	....
Rome	42	....	....	....	....	....	....
Total	$3,402	$180	$3,600	$28,042	$8,610	$271,719	$21,120,520

Annual statement showing value of all the property carried on the canals — (Continued).

OFFICES.	AGRICULTURE — VEGETABLE FOOD.						
	Rye.	Corn.	Corn meal.	Barley.	Barley malt.	Oats.	Bran and shipstuffs.
Albany	......	$22,921	....	$14,136	$7,040	$25,122	$4,210
West Troy	......	....	$122,108	24,569	62,581	6,993	....
Syracuse	......	1,981	....	9,136	84,819	448	22,743
Rochester	......	4,565	....	229,263	40,649	....	783
Tonawanda	......	....	....	....	....	....	....
Buffalo	$89,487	2,779,594	....	1,189,714	138,442	1,978,945	14,368
Waterford	1,320	....	....	....	....	135	180
Whitehall	......	....	....	....	....	18,909	....
Oswego	4,481	111,106	....	167,312	94,415	....	792
Geneva	......	....	....	....	11,088	....	....
Boonville	......	11,472	....	....	....	1,624	475
Rome	......	160	....	....	....	....	....
Total	$95,288	$2,931,799	$122,108	$1,634,130	$439,034	$2,032,176	$43,551

Annual statement showing value of all the property carried on the canals — (Continued).

OFFICES.	AGRICULTURE — VEGETABLE FOOD.				ALL OTHER AGRICULTURAL PRODUCTS.		
	Peas and beans.	Apples.	Potatoes.	Dried fruit.	Hemp.	Clover and grass seed.	Flaxseed.
Albany	$10,357	....	....	$12,680	$105,793	$7,336	....
West Troy	....	$6,373	....	40,800	6,496	8,198	....
Syracuse	....	32,373	$23,140	....	....	....	....
Rochester	....	185,773	....	....	....	....	....
Tonawanda	....	270	....	....	....	....	....
Buffalo	....	....	....	....	....	....	$5,463,993
Waterford	184,800	72,016	96,716	....	....	....	....
Whitehall	....	37,384	30,095	....	....	....	....
Oswego	43,241	....	....	....	....	....	....
Geneva	....	....	....	....	....	....	....
Boonville	....	70	25,480	....	....	....	....
Rome	....	....	....	....	....	....	....
Total	$238,398	$334,259	$175,431	$53,480	$112,289	$15,534	$5,463,993

Annual statement showing value of all the property carried on the canals — (Continued).

OFFICES.	MANUFACTURES.							
	Domestic spirits.	Leather.	Furniture.	Bar and pig lead.	Pig iron.	Bloom and bar iron.	Castings and ironware.	Domestic woolens.
Albany	......	$7,740	$560	$6,720	$53,263	$7,896	$25,250	$168,451
West Troy	$902	......	5,040	......	188,768	9,878	29,457	....
Syracuse	......	......	......	......	2,251	....	....	....
Rochester	......	......	......	......	4,173	....	2,150	....
Tonawanda	5,064	......	......	......	18,990	....	....	....
Buffalo	......	......	......	......	106,659	....	3,600	....
Waterford	1,620	......	......	......	14,797	....	15,864	....
Whitehall	......	......	......	......	94,272	20,328	20	....
Oswego	10,494	......	......	......	....	....	....	....
Geneva	......	......	......	......	....	....	....	....
Boonville	787	......	500	......	....	....	....	....
Rome	......	......	......	......	....	....	24,000	....
Total	$18,867	$7,740	$6,100	$6,720	$483,173	$38,102	$100,341	$168,451

Annual statement showing value of all the property carried on the canals — (Continued).

OFFICES.	MANUFACTURES.		MERCHANDISE.				
	Domestic salt.	Foreign salt.	Sugar.	Molasses.	Coffee.	Nails, spikes and horseshoes.	Iron and steel.
Albany	$314	$4,286	$157,670	$8,613	$99,399	$18,421	$147,898
West Troy	12,767	18,205	78,056	17,888	....	2,788	77,794
Syracuse	502,850	....	8,400	....	....	....	3,000
Rochester	81,934	....	....	....	....	....	....
Tonawanda	....	....	....	....	....	....	....
Buffalo	....	....	....	....	....	....	....
Waterford	1,150	40,527	43,284	5,500	....	20,010	38,383
Whitehall	....	....	....	....	....	4,500	160
Oswego	....	....	....	....	....	....	....
Geneva	....	....	....	....	....	....	....
Boonville	77	....	2,963	....	....	358	237
Rome	7	....	....	25	....	....	....
Total	$599,099	$63,018	$290,373	$32,026	$99,399	$46,077	$267,472

Annual statement showing value of all the property carried on the canals — (Continued).

OFFICES.	MERCHANDISE.			OTHER ARTICLES.		
	Railroad iron.	Flint, enamel, crockery and glassware.	All other merchandise.	Stone lime and clay.	Copper ore.	Rock and super-phosphates.
Albany	....	$19,000	$12,994,466	$138,729	....	$55,745
West Troy	$11,220	11,200	51,738,218	915,721	....	59,104
Syraouse	....	31,500	10,977,691	198,030	....	1,320
Rochester	....	104,800	9,428,040	75,124	....	1,481
Tonawanda	....	....	2,680,000	219,963	....	....
Buffalo	....	....	2,852,000	12,030	$48,139	....
Waterford	4,502	....	7,308,645	144,487	....	....
Whitehall	....	....	44,000	5,093	....	....
Oswego	....	....	45,200	8,625	....	....
Geneva	....	....	....	53,597	....	....
Boonville	....	....	193,570	2,050	....	....
Rome	....	....	1,522,375	651	....	....
Total	$15,722	$166,500	$99,784,205	$1,774,100	$48,139	$117,650

Annual statement showing value of all the property carried on the canals — (Concluded).

OFFICES.	OTHER ARTICLES.					Total value.
	Anthracite coal.	Bituminous coal.	Petroleum.	Iron ore.	Sundries.	
Albany	$221,656	....	$14,544	....	$106,326	$14,931,793
West Troy	1,245,531	$7,718	....	$28,480	1,933,710	57,045,376
Syracuse	1,065,950	16,277	5,621	....	432.212	14,125,538
Rochester	145,647	7,328	....	....	113,405	10,501,177
Tonawanda	....	....	....	....	451,255	11,243,181
Buffalo	....	87,647	220,194	....	389,680	37,653,145
Waterford	836,107	11,212	284	....	40,800	11,577,591
Whitehall	....	....	....	1,337,526	749,320	5,312,195
Oswego	10,770	5,259	....	....	25,000	1,648,307
Geneva	42,310	133,854	....	....	52,000	305,161
Boonville	9,503	2,339	....	....	....	1,549,075
Rome.	15,535	123	....	....	....	1,704,409
Total	$3,593,009	$271,757	$240,643	$1,366,006	$4,293,708	$167,596,948

ANNUAL STATEMENT *showing tons of property left at tide-water during the season of* 1892.

OFFICES.	THE FOREST — PRODUCT OF WOOD.				Agriculture: Product of animals — Cheese.	AGRICULTURE — VEGETABLE FOOD.		
	Boards and scantling.	Shingles.	Timber.	Wood.		Flour.	Wheat.	Rye.
Albany	420,000	179	....	2,789	....	......	......	....
West Troy	41,640	......	13,422	16,945	1	60	......	59
Waterford	6,332	......	1,300	23,274	....	97	1	....
Total	467,972	179	14,722	43,008	1	157	1	59

Annual statement showing property left at tide-water — (Continued).

OFFICES.	AGRICULTURE — VEGETABLE FOOD.								
	Corn.	Corn meal.	Barley.	Barley malt.	Oats.	Bran and ship-stuffs.	Peas and beans.	Apples.	Potatoes.
Albany	2,934	......	1,890	621	......	......	9	......	......
West Troy	330	3,478	480	1,250	......	......	......	109	183
Waterford	1,069	......	......	......	1,199	248	......	2,265	3,793
Total	4,333	3,478	2,370	1,871	1,199	248	9	2,374	3,976

Annual statement showing property left at tide-water — (Continued).

OFFICES.	MANUFACTURES.							MERCHANDISE.	
	Domestic spirits.	Furniture.	Pig iron.	Bloom and bar iron.	Castings and ironware.	Domestic salt.	Foreign salt.	Molasses.	Nails, spikes and horseshoes.
Albany	......	......	......	......	......	1,299	....	......	......
West Troy	......	10	801	......	......	10,536	17	1	22
Waterford	5	......	1,114	3	260	......	88	......	......
Total	5	10	1,915	3	260	11,835	105	1	22

Annual statement showing property left at tide-water — (Concluded).

OFFICES.	MERCHANDISE.			OTHER ARTICLES.					Total tons.
	Iron and steel.	Flint, enamel, crockery and glassware.	All other merchandise.	Stone, lime and clay.	Anthracite coal.	Bituminous coal.	Iron ore.	Sundries.	
Albany	....	8	722	3,824	19,988	.....	140	301	454,704
West Troy	224	22	6,156	30,141	67,198	......	3,504	353	196,942
Waterford	....	....	10,475	9,937	57,972	1,081	......	185	120,698
Total	224	30	17,353	43,902	145,158	1,081	3,644	839	772,344

ANNUAL STATEMENT *showing tons of property left at tide-water from the Oswego canal during the season of* 1892.

OFFICES.	THE FOREST — PRODUCT OF WOOD.					AGRICULTURE — VEGETABLE FOOD.		
	Boards and scantling.	Shingles.	Wood.	Ashes, pot and pearl.	Ashes, leached.	Flour.	Wheat.	Rye.
Albany to New York............	17,857	77	....	......	476	433	770	....
Albany........................	15,577	33	1,966	......	......	......	....	....
West Troy to New York	5,492	39	28	880	......	......	1,083	199
Total......................	38,926	149	1,994	880	476	433	1,853	199

Annual statement showing property left at tide-water from the Oswego canal — (Concluded).

OFFICES.	AGRICULTURE — VEGETABLE FOOD.				All other merchandise.	Sundries.	Total tons.
	Corn.	Barley.	Barley malt.	Peas and beans.			
Albany to New York	289	823	1,637	234	....	....	22,596
Albany	....	....	....	....	....	30	17,606
West Troy to New York.........	....	4,153	176	238	269	....	12,557
Total	289	4,976	1,813	472	269	30	52,759

ANNUAL STATEMENT *showing value of all the property left at tide-water from the Oswego canal.*

OFFICES.	THE FOREST—PRODUCT OF WOOD.					AGRICULTURE—VEGETABLE FOOD.		
	Boards and scantling.	Shingles.	Wood.	Ashes, pot and pearl.	Ashes, leached.	Flour.	Wheat.	Rye.
Albany to New York..........	$289,278	$1,989	......	....	$3,173	$25,031	$26,191	....
Albany	252,342	848	$2,808	....	......	....	....	....
West Troy to New York	88,965	133	40	$80,000	......	....	36,825	$4,481
Total	$630,585	$2,970	$2,848	$80,000	$3,173	$25,031	$63,016	$4,481

Annual statement showing value of all the property left at tide-water from the Oswego canal — (Concluded).

OFFICES.	AGRICULTURE — VEGETABLE FOOD.				All other merchandise.	Sundries.	Total value.
	Corn.	Barley.	Barley malt.	Peas and beans.			
Albany to New York	$5,672	$26,066	$84,735	$21,450	....	....	$483,585
Albany	....	....	....	....	....	$6,000	261,988
West Troy to New York	....	131,518	1,760	21,791	$107,520	....	473,033
Total	$5,672	$157,584	$86,495	$43,241	$107,520	$6,000	$1,218,616

ANNUAL STATEMENT *showing the total quantity (in tons of* 2,000 *lbs.) of property cleared at Buffalo during the season of* 1892, *and the value of the same.*

	Tons.	Value.
Boards and scantling	63,615	$1,030,575
Shingles	65	1,674
Timber	40	540
Staves and heading	7,210	288,390
Ashes, leached	400	2,666
Flour	2,485	174,781
Wheat	611,177	20,780,027
Rye	3,997	89,487
Corn	141,506	2,779,594
Barley	37,570	1,189,714
Barley malt	2,674	138,442
Oats	70,363	1,978,945
Bran and shipstuffs	798	14,368
Flaxseed	99,345	5,463,993
Pig iron	5,891	106,659
Castings and ironware	90	3,600
All other merchandise	7,130	2,852,000
Stone, lime and clay	4,812	12,030
Bituminous coal	29,215	87,647
Copper ore	201	48,139
Petroleum	9,786	220,194
Sundries	1,948	389,680
Total	1,100,318	$37,653,145

ANNUAL STATEMENT *showing the total amount (in tons of* 2,000 *lbs.) of all articles left at Buffalo during the season of* 1892, *and the value of the same.*

	Tons.	Value.
Boards and scantling	1,963	$31,797
Timber	217	2,936
Ashes, pot and pearl	332	30,225
Hides	60	6,300
Wheat	216	7,359
Barley	730	23,116
Oats	2	45
Apples	2	210
Dried fruit	155	49,640
Hemp	952	138,069
Clover and grass seed	22	1,344
Flaxseed	22	1,232
Domestic spirits	44	264
Leather	13	7,740
Pig iron	6,500	117,006
Bloom iron	252	7,560
Castings and ironware	413	16,531
Domestic woolens	165	115,246
Domestic salt	2,047	13,647
Foreign salt	600	12,003
Sugar	165	18,819
Molasses	570	28,476
Coffee	183	91,734
Nails, spikes and horseshoes	408	20,348
Iron and steel	3,817	152,665
Railroad iron	1,055	31,655
Flint, enamel, etc	77	38,640
All other merchandise	103,735	50,510,974
Stone, lime and clay	228,730	571,825
Phosphate	7,181	50,265
Anthracite coal	54,760	273,800
Petroleum	54	1,224
Sundries	41,215	8,243,050
Total	456,657	$60,615,745

ANNUAL STATEMENT *showing the total quantity (in tons of 2,000 lbs.) of property cleared at Oswego during the season of 1892, and the value of the same.*

	Tons.	Value.
Boards and scantling	55,432	$898,013
Shingles	493	12,809
Staves and heading	247	9,889
Wood	6,849	9,784
Ashes, leached	1,672	11,146
Lard, tallow, etc	5	800
Flour	273	15,781
Wheat	4,806	163,390
Rye	199	4,481
Corn	5,657	111,106
Barley	5,283	167,312
Barley malt	1,824	94,415
Bran and shipstuffs	44	792
Peas and beans	472	43,241
Domestic spirits	35	10,494
All other merchandise	113	45,200
Stone, lime and clay	3,450	8,625
Anthracite coal	2,154	10,770
Bituminous coal	1,753	5,259
Sundries	125	25,000
Total	90,886	$1,648,307

ANNUAL STATEMENT *showing the total quantity (in tons of* 2,000 *lbs.) of property left at Oswego during the season of* 1892, *and the value of the same.*

	Tons.	Value.
Boards and scantling	1,734	$28,094
Shingles	2	55
Timber	60	810
Wool	73	17,552
Flour	30	1,719
Wheat	1,070	36,379
Corn	1,400	27,494
Barley	303	12,768
Barley malt	325	16,821
Bran and shipstuffs	7	126
Apples	44	2,044
Castings and ironware	8	300
Domestic salt	455	3,030
Flint	5	2,500
All other merchandise	2,235	894,097
Stone, lime and clay	13,711	34,277
Phosphate	6	42
Anthracite coal	7,081	35,404
Bituminous coal	1,806	5,418
Petroleum	50	1,125
Sundries	85	17,048
Total	30,490	$1,137,103

ANNUAL STATEMENT *showing total quantity* (*in tons of* 2,000 *lbs.*) *of property cleared on the* **Black River** *canal during the season of* 1892, *and the value of the same.*

	Tons.	Value.
Boards and scantling	86,356	$1,165,821
Timber	8,928	100,440
Wood	14,238	28,476
Pork	7	658
Flour	35	2,175
Corn	605	11,472
Oats	58	1,624
Bran and shipstuffs	26	475
Apples	2	70
Potatoes	1,176	25,480
Domestic spirits	3	787
Furniture	1	500
Domestic salt	12	77
Sugar	25	2,963
Nails, spikes and horseshoes	7	358
Iron and steel	6	237
All other merchandise	484	193,570
Stone, lime and clay	820	2,050
Anthracite coal	1,901	9,503
Bituminous coal	780	2,339
Total	115,469	$1,549,075

ANNUAL STATEMENT *showing total quantity (in tons of* 2,000 *lbs.) of property left on the Black River canal during the season of* 1892, *and the value of the same.*

	Tons.	Value.
Boards and scantling	138	$1,875
Wood	276	552
Pork	7	658
Flour	117	7,338
Corn	695	13,180
Oats	63	1,781
Bran and shipstuffs	429	7,726
Apples	20	945
Domestic spirits	4	1,286
Oil meal and cake	4	90
Furniture	1	500
Castings and ironware	10	400
Domestic salt	387	2,562
Sugar	25	2,963
Nails, spikes and horseshoes	7	358
Iron and steel	6	237
All other merchandise	507	202,656
Stone, lime and clay	848	2,121
Anthracite coal	2,773	13,866
Bituminous coal	1,682	5,045
Total	7,999	$266,139

Annual Statement *showing total quantity (in tons of* 2,000 *lbs.) of property cleared on the Cayuga and Seneca canal during the season of* 1892, *and the value of the same.*

	Tons.	Value.
Boards and scantling	688	$12,312
Barley malt	214	11,088
Stone, lime and clay	21,439	53,597
Anthracite coal	8,462	42,310
Bituminous coal	44,618	133,854
Sundries	260	52,000
Total	75,677	$305,161

Annual Statement *showing quantity (in tons of* 2,000 *lbs.) of property left at tide-water from the Oswego canal during the season of* 1892, *and the value of the same.*

	Tons.	Value.
Boards and scantling	38,926	$630,585
Shingles	147	2,970
Wood	1,994	2,848
Ashes, pot and pearl	880	80,000
Ashes, leached	476	3,173
Flour	433	25,031
Wheat	1,853	63,016
Rye	199	4,481
Corn	289	5,672
Barley	976	157,584
Barley malt	1,813	86,495
Peas and beans	472	43,241
All other merchandise	269	107,520
Sundries	30	6,000
Total	52,759	$1,218,616

ANNUAL STATEMENT *showing total quantity (in tons of* 2,000 *lbs.) of property left at tide-water from the Black River canal during the season of* 1892, *and the value of the same.*

	Tons.	Value.
Boards and scantling	56,468	$914,787
Timber	6,530	88,155
Potatoes	1,180	25,565
All other merchandise	145	58,110
Total	64,323	$1,086,617

ANNUAL STATEMENT *showing total quantity (in tons of* 2,000 *lbs.) of property left at tide-water from the Cayuga and Seneca canal during the season of* 1892, *and the value of the same.*

	Tons.	Value.
Boards and scantling	333	$5,940
Barley malt	216	11,157
Total	549	$17,097

ANNUAL STATEMENT *showing total quantity (in tons of* 2,000 *lbs.) of property cleared at Whitehall during the season of* 1892, *and the value of the same.*

	Tons.	Value.
Boards and scantling	175,698	$2,846,305
Shingles	17	229
Timber	182	24,570
Wood	69,565	99,484
Oats	673	18,909
Apples	801	37,384
Potatoes	1,389	30,095
Pig iron	5,238	94,272
Bloom iron	678	20,328
Castings and ironware	1	20
Nails, spikes and horseshoes	90	4,500
Iron and steel	40	160
All other merchandise	110	44,000
Stone, lime and clay	2,038	5,093
Iron ore	133,753	1,337,526
Sundries	3,747	749,320
Total	394,020	$5,312,195

ANNUAL STATEMENT *showing total quantity* (*in tons of* 2,000 *lbs.*) *of property left at Whitehall during the season of* 1892, *and the value of the same.*

	Tons.	Value.
Boards and scantling	540	$11,664
Pork	20	1,750
Flour	23	1,331
Peas and beans	2,016	182,050
Domestic spirits	3	902
Pig iron	1,323	23,819
Castings and ironware	1,821	72,838
Domestic salt	2,936	19,574
Foreign salt	1,349	26,970
Sugar	336	40,284
Molasses	90	4,500
Nails, spikes and horseshoes	167	8,345
Iron and steel	973	38,920
Railroad iron	150	4,502
All other merchandise	7,590	3,036,100
Stone, lime and clay	19,915	49,787
Anthracite coal	196,013	980,065
Bituminous coal	4,296	12,887
Petroleum	48	1,229
Sundries	1,775	353,000
Total	241,384	$5,870,517

ANNUAL STATEMENT *showing the total quantity of shipments of each article first cleared on the canal at, and the total quantity of shipments of each article left from the canal at Whitehall, from the* 1st *of May to the* 1st *of December,* 1892, *going to and coming from Vermont and Canada.*

ARTICLES.	Description.	QUANTITY CLEARED.			
		Coming from Canada.	Coming from New York.	Coming from Vermont.	Total cleared.
THE FOREST.					
Product of wood:					
Boards and scantling	Feet	85,020,400	18,070,000	2,328,300	105,418,700
Shingles	M.	32	100	....	132
Timber	Cubic feet	....	91,000	....	91,000
Wood	Cords	8,444	16,427	....	24,871
AGRICULTURE.					
Product of animals:					
Pork	Barrels	....	....	....	....
Vegetable food:					
Flour	Barrels	....	....	....	....
Oats	Bushels	40,699	1,320	....	42,019
Peas and beans	Bushels	....	....	....	....
Apples	Barrels	....	4,416	6,265	10,681
Potatoes	Bushels	....	46,300	....	46,300

MANUFACTURES.					
Pig iron	Pounds		10,474,700		10,474,700
Bloom and bar iron	Pounds		1,355,200		1,355,200
Castings and ironware	Pounds		1,000		1,000
Domestic salt	Pounds				
Foreign salt	Pounds				
Domestic spirits	Pounds				
MERCHANDISE.					
Sugar	Pounds				
Molasses	Pounds				
Nails, spikes and horseshoes	Pounds			180,000	180,000
Iron and steel	Pounds		80,000		80,000
Railroad iron	Pounds				
All other merchandise	Pounds			220,000	220,000
OTHER ARTICLES.					
Stone, lime and clay	Pounds		3,839,800	235,200	4,075,000
Anthracite coal	Pounds				
Bituminous coal	Pounds				
Iron ore	Pounds		267,505,200		267,505,200
Petroleum or earth oil, crude and refined	Barrels				
Sundries	Pounds	2,588,500	4,024,700	880,000	7,493,200

Annual statement showing total quantity of shipments at and from Whitehall, etc. — (Concluded).

ARTICLES.	Description.	QUANTITY LEFT.			
		Going to Canada.	Going to New York.	Going to Vermont.	Total left.
THE FOREST.					
Product of wood:					
Boards and scantling	Feet	....	432,000	....	432,000
Shingles	M.	....	....	....	....
Timber	Cubic feet	....	....	....	....
Wood	Cords	....	....	....	....
AGRICULTURE.					
Product of animals:					
Pork	Barrels	....	....	125	125
Vegetable food:					
Flour	Barrels	....	213	....	213
Oats	Bushels	....	....	....	....
Peas and beans	Bushels	....	....	67,200	67,200
Apples	Barrels	....	....	....	....
Potatoes	Bushels	....	....	....	....
MANUFACTURES.					
Pig iron	Pounds	....	....	2,646,600	2,646,600
Bloom and bar iron	Pounds	....	....	....	....
Castings and ironware	Pounds	....	1,445,000	2,196,900	3,641,900

Domestic salt	Pounds	....	181,200	5,691,200	5,872,400
Foreign salt	Pounds	....	98,500	2,598,500	2,697,000
Domestic spirits	Gallons	....	....	752	752
MERCHANDISE.					
Sugar	Pounds	....	43,400	628,000	671,400
Molasses	Pounds	....	64,000	116,000	180,000
Nails, spikes and horseshoes	Pounds	....	....	333,800	333,800
Iron and steel	Pounds	16,000	19,300	1,910,700	1,946,000
Railroad iron	Pounds	....	300,160	....	300,160
All other merchandise	Pounds	8,280,400	1,715,400	5,184,700	15,180,500
OTHER ARTICLES.					
Stone, lime and clay	Pounds	30,542,800	3,257,100	6,030,000	39,829,900
Anthracite coal	Pounds	163,401,700	104,680,100	123,944,200	392,026,000
Bituminous coal	Pounds	2,110,100	4,002,800	2,478,200	8,591,100
Iron ore	Pounds	....	....	....	....
Petroleum or earth oil, crude and refined	Barrels	....	60	213	273
Sundries	Pounds	2,247,800	622,200	660,000	3,530,000

ANNUAL STATEMENT *showing lake and canal rates during the season from May* 1 *to December* 1, 1892.

DATE.	WHEAT.		CORN.		OATS.	
	LAKE RATES PER BUSHEL.	CANAL RATES PER BUSHEL.	LAKE RATES PER BUSHEL.	CANAL RATES PER BUSHEL.	LAKE RATES PER BUSHEL.	CANAL RATES PER BUSHEL.
	From Chicago to Buffalo.	From Buffalo to New York.	From Chicago to Buffalo.	From Buffalo to New York.	From Chicago to Buffalo.	From Buffalo to New York.
May	$.0188	$.0279	$.0160	$.0248	$.0148	$.0147
June	.0185	.0250	.0160	.0200	.0134	.0147
July	.0203	.0245	.0175	.0210	.0148	.0158
August	.0230	.0298	.0205	.0266	.0170	.0193
September	.0238	.0388	.0213	.0346	.0188	.0256
October	.0240	.0478	.0215	.0445	.0190	.0321
November	.0263	.0470	.0238	.0421	.0215	.0305
Average	$.0221	$.0344	$.0195	$.0305	$.0170	$.0218

The following statement shows shipments of grain going east from Buffalo by rail from May 1 *to Nov.* 30, 1892, *inclusive.*

	Wheat.	Corn.	Oats.	Rye.	Barley.
	Bush.	Bush.	Bush.	Bush.	Bush.
From Buffalo	39,450,793	17,814,821	7,274,000	675,240	28,200

The following statement shows the average lake and canal rates on wheat and corn since 1880.

YEAR.	Freight, Buffalo to New York.			Tolls.			Freight, not including tolls.			Lake freight.		
	c.	m.	fr.	c.	m.	fr.	c.	m.	fr.	c.	m.	fr.
1880.												
Wheat	6	5	0	1	0	3	5	4	7	5	7	0
Corn	6	0	0	0	9	6	5	0	4	5	0	0
1881.												
Wheat	4	8	8	1	0	3	3	8	5	3	4	0
Corn	4	3	7	0	9	6	3	4	1	2	9	2
1882.												
Wheat	5	3	8	1	0	3	4	3	5	2	6	1
Corn	4	8	7	0	9	6	3	9	1	2	2	1
1883.												
Wheat	4	8	8	Free.			....			3	4	7
Corn	4	4	7	Free.			....			3	1	1
1884.												
Wheat	4	2	0	Free.			....			2	0	7
Corn	3	7	6	Free.			....			1	8	4
1885.												
Wheat	3	8	1	Free.			....			3	0	6
Corn	3	4	8	Free.			....			1	7	1
1886.												
Wheat	5	0	3	Free.			....			3	6	1
Corn	4	5	5	Free.			....			3	3	7
1887.												
Wheat	4	4	4	Free.			....			4	0	3
Corn	4	0	4	Free.			....			3	7	7
1888.												
Wheat	3	4	1	Free.			....			2	4	9
Corn	3	0	1	Free.			....			2	3	3
1889.												
Wheat	4	3	7	Free.			....			2	5	3
Corn	3	9	4	Free.			....			2	2	5
1890.												
Wheat	3	8	7	Free.			....			1	9	8
Corn	3	3	9	Free.			....			1	6	9
1891.												
Wheat	3	5	3	Free.			....			....		
Corn	3	2	0	Free.			....			....		
1892.												
Wheat	3	4	4	Free.			....			....		
Corn	3	0	5	Free.			....			....		

The following table shows the separate tonnage of the New York Central, the Erie Railway and the canals each year since 1853, *with the losses or gains of each year compared with the preceding year.*

CANALS AND RAILROADS.	1853.	1854.	Gain in 1854.	Loss in 1854.
New York Canals, tons	4,247,853	4,165,862	....	81,991
New York Central Railroad, tons	360,000	549,804	189,804	....
New York and Erie Railroad, tons	631,039	743,250	112,211	....
	5,238,892	5,458,916	302,015	81,991
	1854.	1855.	Gain in 1855.	Loss in 1855.
New York Canals, tons	4,165,862	4,022,617	....	143,245
New York Central Railroad, tons	549,804	670,073	120,269	....
New York and Erie Railroad, tons	743,250	842,048	19,798	....
	5,458,916	5,534,738	219,067	143,245
	1855.	1856.	Gain in 1856.	Loss in 1856.
New York Canals, tons	4,022,617	4,116,084	93,456	....
New York Central Railroad, tons	670,073	776,112	106,039	....
New York and Erie Railroad, tons	842,048	943,215	101,167	....
	5,534,738	5,835,409	300,671	....

	1856.	1857.	Gain in 1857.	Loss in 1857.
New York Canals, tons	4,116,082	3,344,061	....	772,021
New York Central Railroad, tons	776,112	838,791	62,679	....
New York and Erie Railroad, tons	943,215	978,066	34,851	....
	5,835,409	5,160,918	97,530	772,021

	1857.	1858.	Gain in 1858.	Loss in 1858.
New York Canals, tons	3,344,061	3,665,192	321,131	....
New York Central Railroad, tons	838,791	765,407	....	73,284
New York and Erie Railroad, tons	978,066	816,054	....	161,112
	5,160,918	5,247,553	321,131	234,496

	1858.	1859.	Gain in 1859.	Loss in 1859.
New York Canals, tons	3,665,192	3,781,684	116,492	....
New York Central Railroad, tons	765,407	834,319	68,912	....
New York and Erie Railroad, tons	816,954	869,073	53,119	....
	5,247,553	5,485,076	238,523	....

	1859.	1860.	Gain in 1860.	Loss in 1860.
New York Canals, tons	3,781,684	4,650,214	868,530	....
New York Central Railroad, tons	834,319	1,028,183	193,864	....
New York and Erie Railroad, tons	869,073	1,139,554	270,481	....
	5,485,076	6,817,951	1,332,875	....

Showing separate tonnage of the New York Central, Erie Railway and the canals each year since 1853 — (Continued).

CANALS AND RAILROADS.	1860.	1861.	Gain in 1861.	Loss in 1861.
New York Canals, tons	4,650,214	4,507,635	....	142,579
New York Central Railroad, tons	1,028,183	1,167,302	139,119	....
New York and Erie Railroad, tons	1,139,554	1,253,418	113,864	....
	6,817,951	6,928,355	252,983	142,579
	1861.	1862.	Gain in 1862.	Loss in 1862.
New York Canals, tons	4,507,635	5,598,785	1,091,150	....
New York Central Railroad, tons	1,167,302	1,387,433	220,131	....
Erie Railway, tons	1,253,418	1,632,955	379,537	....
	6,928,355	8,619,173	1,690,818	....
	1862.	1863.	Gain in 1863.	Loss in 1863.
New York Canals, tons	5,598,785	5,557,692	....	41,093
New York Central Railroad, tons	1,387,433	1,449,604	62,171	....
Erie Railway, tons	1,632,955	1,815,096	182,141	....
	8,619,173	8,822,392	244,312	41,093

	1863.	1864.	Gain in 1864.	Loss in 1864.
New York Canals, tons	5,557,692	4,852,941	....	704,751
New York Central Railroad, tons	1,449,604	1,557,148	107,544	....
Erie Railway, tons	1,815,096	2,170,798	355,702	....
	8,822,392	8,580,887	463,246	704,751

	1864.	1865.	Gain in 1865.	Loss in 1865.
New York Canals, tons	4,852,941	4,729,654	....	123,287
New York Central Railroad, tons	1,557,148	1,275,299	....	281,849
Erie Railway, tons	2,170,798	2,234,350	63,552	....
	8,580,887	8,239,303	63,552	405,136

	1865.	1866.	Gain in 1866.	Loss in 1866.
New York Canals, tons	4,729,654	5,775,220	1,045,566	....
New York Central Railroad, tons	1,275,299	1,602,197	326,898	....
Erie Railway, tons	2,234,350	3,242,792	1,008,442	....
	8,239,303	10,620,209	2,380,906	....

	1866.	1867.	Gain in 1867.	Loss in 1867.
New York Canals, tons	5,775,220	5,688,325	....	86,895
New York Central Railroad, tons	1,602,197	1,667,926	65,729	....
Erie Railway, tons	3,242,792	3,484,546	241,754	....
	10,620,209	10,840,797	307,483	86,895

Showing separate tonnage of the New York Central, Erie Railway and the canals each year since 1853 — (Continued).

CANALS AND RAILROADS.	1867.	1868.	Gain in 1868.	Loss in 1868.
New York Canals, tons	5,688,325	6,442,225	753,900	....
New York Central Railroad, tons	1,667,926	1,846,599	178,673	....
Erie Railway, tons	3,484,546	3,908,243	423,697	....
	10,840,797	12,197,067	1,356,270	....
	1868.	1869.	Gain in 1869.	Loss in 1869.
New York Canals, tons	6,442,225	5,859,080	....	583,145
New York Central Railroad, tons	1,846,599	2,281,885	435,286	....
Erie Railway, tons	3,908,243	4,312,209	403,966	....
	12,197,067	12,453,174	839,252	583,145
	1869.	1870.	Gain in 1870.	Loss in 1870.
New York Canals, tons	5,859,080	6,173,769	314,689	....
New York Central Railroad, tons	2,281,885	4,122,000	1,840,115	....
Erie Railway, tons	4,312,209	4,852,505	540,296	....
	12,453,174	15,148,274	2,695,100	....

	1870.	1871.	Gain in 1871.	Loss in 1871.
New York Canals, tons	6,173,769	6,467,888	294,119	....
New York Central Railroad, tons	4,122,000	4,532,956	410,056	....
Erie Railway, tons	4,852,505	4,844,208	....	8,297
	15,148,274	15,844,152	704,175	8,297

	1871.	1872.	Gain in 1872.	Loss in 1872.
New York Canals, tons	6,467,888	6,673,370	205,482	....
New York Central Railroad, tons	4,532,056	4,393,965	....	138,091
Erie Railway, tons	4,844,208	5,564,274	720,066	....
	15,844,152	16,631,609	925,548	138,091

	1872.	1873.	Gain in 1873.	Loss in 1873.
New York Canals, tons	6,673,370	6,364,782	....	308,588
New York Central Railroad, tons	4,393,965	5,522,724	1,128,759	....
Erie Railway, tons	5,564,274	6,312,702	748,430	....
	16,631,609	18,200,208	1,877,189	308,588

	1873.	1874.	Gain in 1874.	Loss in 1874.
New York Canals, tons	6,364,782	5,804,588	....	560,194
New York Central Railroad, tons	5,522,724	6,114,678	591,954	....
Erie Railway, tons	6,312,702	6,364,276	51,574	....
	18,200,208	18,283,542	643,528	560,194

Showing separate tonnage of the New York Central, Erie Railway and the canals each year since 1853 — (Continued).

CANALS AND RAILROADS.	1874.	1875.	Gain in 1875.	Loss in 1875.
New York Canals, tons	5,804,588	4,859,858	....	944,730
New York Central Railroad, tons	6,114,678	6,001,954	....	112,724
Erie Railway, tons	6,364,276	6,239,946	....	124,330
	18,283,542	17,101,758	....	1,181,784
	1875.	**1876.**	**Gain in 1876.**	**Loss in 1876.**
New York Canals, tons	**4,859,858**	**4,172,129**	....	**687,729**
New York Central Railroad, tons	**6,001,954**	**6,803,680**	**801,726**	....
Erie Railway, tons	**6,239,946**	**5,972,818**	....	**267,128**
	17,101,758	**16,948,627**	**801,726**	**954,857**
	1876.	**1877.**	**Gain in 1877.**	**Loss in 1877.**
New York Canals, tons	**4,172,129**	**4,955,963**	**783,834**	....
New York Central Railroad, tons	**6,803,680**	**6,351,356**	....	**452,324**
Erie Railway, tons	**5,972,818**	**6,182,451**	**209,633**	....
	16,948,627	**17,489,770**	**993,467**	**452,324**

	1877.	1878.	Gain in 1878.	Loss in 1878.
New York Canals, tons	4,955,963	5,171,320	215,357	....
New York Central Railroad, tons	6,351,356	7,695,413	1,344,057	....
Erie Railway, tons	6,182,451	6,150,568	....	31,833
	17,489,770	19,017,301	1,559,414	31,883

	1878.	1879.	Gain in 1879.	Loss in 1879.
New York Canals, tons	5,171,320	5,362,372	191,052	....
New York Central Railroad, tons	7,695,413	9,015,753	1,320,340	....
Erie Railway, tons	6,150,568	8,212,641	2,062,073	....
	19,017,301	22,590,766	3,573,465	....

	1879.	1880.	Gain in 1880.	Loss in 1880.
New York Canals, tons	5,362,372	6,457,556	1,095,284	....
New York Central Railroad, tons	9,015,753	10,533,038	1,517,285	....
Erie Railway, tons	8,212,641	8,715,892	503,251	....
	22,590,766	25,706,586	3,115,820	....

	1880.	1881.	Gain in 1881.	Loss in 1881.
New York Canals, tons	6,457,656	5,179,192	....	1,278,464
New York Central Railroad, tons	10,533,038	11,591,379	1,058,341	....
Erie Railway, tons	8,715,892	11,086,823	2,370,931	....
	25,706,586	27,857,394	3,429,272	1,278,464

Showing separate tonnage of the New York Central, Erie Railway and the canals each year since 1853 — (Continued).

CANALS AND RAILROADS.	1881.	1882.	Gain in 1882.	Loss in 1882.
New York Canals, tons	5,179,192	5,467,423	228,231	....
New York Central Railroad, tons	11,591,379	11,330,393	....	260,986
Erie Railway, tons	11,086,823	11,895,238	808,415	....
	27,857,394	28,693,054	1,096,646	260,986
	1882.	**1883.**	**Gain in 1883.**	**Loss in 1883.**
New York Canals, tons	**5,467,423**	**5,664,056**	**196,633**	....
New York Central Railroad, tons	**11,330,393**	**10,892,440**	....	**437,953**
Erie Railway, tons	**11,895,238**	**13,610,623**	**1,715,385**	....
	1883.	**1884.**	**Gain in 1884.**	**Loss in 1884.**
New York Canals, tons	**5,664,056**	**5,009,488**	....	**654,568**
New York Central Railroad, tons	**10,892,440**	**10,212,418**	....	**680,022**
Erie Railway, tons	***13,610,623**	**†16,219,598**	**‡2,608,975**	....
	1884.	**1885.**	**Gain in 1885.**	**Loss in 1885.**
New York Canals, tons	**5,009,488**	**4,731,784**	....	**277,704**
New York Central Railroad, tons	**10,212,418**	**10,733,499**	**521,081**	....
Erie Railway, tons	**11,071,938**	**10,253,489**	....	**818,449**
New York, Buffalo and West Shore Railroad, tons	**839,539**	**1,825,176**	**985,637**	....

	1885.	1886.	Gain in 1886.	Loss in 1886.
New York Canals, tons	4,731,784	5,293,982	562,198	....
New York Central Railroad, tons	10,733,499	12,636,435	§1,902,936	....
Erie Railway, tons	10,253,489	‖18,668,238	¶8,414,750	....
New York, Buffalo and West Shore Railroad, tons	1,825,176	431,409	....	1,393,767

	1886.	1887.	Gain in 1887.	Loss in 1887.
New York Canals, tons	5,293,982	5,553,805	259,823	....
New York Central Railroad, tons	12,636,485	14,531,726	1,895,291	....
Erie Railway, tons	18,668,238	13,949,260	....	4,718,978

	1887.	1888.	Gain in 1888.	Loss in 1888.
New York Canals, tons	5,553,805	4,942,948	....	610,857
New York Central Railroad, tons	14,531,726	15,162,812	631,086	....
Erie Railway, tons	13,949,260	15,174,009	1,224,749	....

	1888.	1889.	Gain in 1889.	Loss in 1889.
New York Canals, tons	4,942,948	5,370,369	427,421	....
New York Central Railroad, tons	15,162,812	15,011,541	....	151,271
Erie Railway, tons	15,174,009	15,084,132	....	89,877

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* Of this amount 1,645,133 tons is the tonnage for five months of the N. Y., P. and O. R. R. Co., leased by the Erie.

† Of this amount 5,147,660 tons is the tonnage for twelve months of the N. Y., P. and O. R. R. Co., leased by the Erie.

‡ An apparent gain. Deducting the tonnage of the N. Y., P. and O. for seventeen months, the tonnage of the New York, Lake Erie and Western shows a loss in 1884 of 893,552.

‖ Of this amount 5,861,321 tons is the tonnage of the N. Y., P. and O. R. R.

§ Net gain 2,553,429 tons.

¶ An apparent gain, which is caused by the additional tonnage of the N. Y., B. and W. S. R. R.

Showing separate tonnage of the New York Central, Erie Railway and the canals each year since 1853 — (Concluded).

CANALS AND RAILROADS.	1889.	1890.	Gain in 1890.	Loss in 1890.
New York Canals, tons	5,370,369	5,246,102	....	124,267
New York Central Railroad, tons	15,011,541	16,108,441	1,096,900	....
Erie Railway, tons	15,084,132	16,269,656	1,185,524	....
	1890.	1891.	Gain in 1891.	Loss in 1891.
New York Canals, tons	5,246,102	4,563,472	....	682,530
New York Central Railroad, tons	16,108,441	16,621,567	513,126	....
Erie Railway, tons	16,269,656	17,339,140	1,069,884	....
	1891.	1892.	Gain in 1892.	Loss in 1892.
New York Canals, tons	4,563,472	4,281,995	....	281,477
New York Central Railroad, tons	16,621,576	20,721,752	4,100,176	....
Erie Railway, tons	17,339,140	18,334,716	995,576	....

The whole number of clearances issued during the season of 1892 *was* 35,200, *and were issued at the following offices:*

Albany	3,578
West Troy	6,799
Syracuse	5,250
Rochester	2,472
Tonawanda	3,111
Buffalo	6,325
Waterford	2,935
Whitehall	2,054
Oswego	676
Geneva	608
Boonville	1,096
Rome	296
Total	35,200

The total tons coming to tide-water for each of the fifty-four years and the aggregate value thereof, in market, was as follows:

YEARS.	Tons.	Value.
1838	640,481	$23,038,510
1839	602,128	20,163,199
1840	669,012	23,213,573
1841	774,334	27,225,322
1842	666,626	22,751,013
1843	836,861	28,453,408
1844	1,019,094	34,183,167
1845	1,204,943	45,452,321
1846	1,362,319	51,105,256
1847	1,744,283	73,092,414
1848	1,447,905	50,883,907
1849	1,579,946	52,375,521
1850	2,033,863	55,474,637
1851	1,977,151	53,927,508
1852	2,234,822	66,893,102
1853	2,505,797	73,688,044
1854	2,223,743	72,120,681
1855	1,890,593	74,177,937
1856	2,123,469	74,286,735
1857	1,617,187	51,190,018
1858	1,985,142	61,536,061
1859	2,121,672	43,175,312
1860	2,854,877	78,798,617
1861	2 980,144	81,432,759
1862	3,402,709	111,176,568
1863	3,274,727	123,173,294
1864	2,805,257	145,609,202
1865	2,730,181	113,865,846
1866	3,305,607	131,801,477
1867	3,029,695	120,902,834
1868	3,240,806	136,446,582
1869	3,096,142	144,866,060
1870	3,156,302	105,517,020
1871	3,494,801	106,874,570
1872	3,647,944	107,086,362
1873	3,376,649	97,869,497
1874	3,123,112	107,976,476
1875	2,608,777	89,447,518
1876	2,426,182	73,893,878
1877	2,986,812	76,787,713
1878	3,637,101	78,563,710
1879	3,286,176	96,992,498
1880	4,067,402	143,572,991
1881	3,065,839	68,785,451
1882	3,068,152	74,303,139

Total tons coming to tide-water — (Concluded).

YEARS.	Tons.	Value.
1883	2,892,176	$66,219,034
1884	2,900,788	66,718,124
1885	2,715,219	55,130,473
1886	3,215,177	67,517,864
1887	3,158,923	71,755,221
1888	2,584,661	58,801,038
1889	2,623,836	62,780,410
1890	3,024,765	62,920,266
1891	2,286,855	57,340,280
1892	2,336,519	73,698,295

The tons of the total movement of articles on all the canals, from 1837 *to* 1892, *both years inclusive, were as follows:*

YEARS.	Products of the forest.	Agriculture.	Manufactures.	Merchandise.	Other articles.	Total.
1837	618,741	208,043	81,735	94,777	168,000	1,171,296
1838	265,089	255,227	101,526	124,290	186,879	1,333,011
1839	667,581	266,052	111,968	132,286	257,826	1,435,713
1840, Genesee Valley canal opened	587,647	393,780	100,367	112,021	222,231	1,416,046
1841	645,548	391,905	127,896	141,054	215,258	1,521,661
1842	504,597	401,276	98,968	101,446	130,644	1,236,931
1843	687,184	455,797	124,277	119,209	126,972	1,513,439
1844	881,774	509,387	144,245	141,930	156,651	1,816,586
1845	916,976	555,160	160,638	151,450	228,543	1,977,565
1846	1,087,714	814,258	149,006	169,799	218,623	2,268,662
1847	1,086,880	1,092,946	176,448	224,890	287,812	2,869,810
1848	1,104,940	913,824	202,781	261,458	331,287	2,796,230
1849	864,373	1,020,259	203,990	255,455	310,088	2,894,732
1850	1,261,991	965,619	200,218	269,370	379,419	3,076,617
1851	1,393,698	1,125,264	222,529	365,404	475,838	3,582,733
1852	1,586,080	1,213,357	207,955	420,295	435,754	3,863,441
1853	1,821,525	1,150,924	230,036	458,327	587,041	4,247,853
1854	1,768,745	992,839	258,021	406,022	740,235	4,165,862
1855	1,534,934	1,047,344	281,873	374,402	784,064	4,022,617
1856	1,478,674	1,192,673	284,901	370,758	789,076	4,116,082
1857	1,364,002	767,370	232,803	222,954	756,932	3,344,061
1858	1,232,968	1,279,891	295,903	188,441	667,989	3,665,192
1859	1,542,035	816,784	299,421	211,182	912,262	3,781,684
1860	1,509,977	1,682,754	268,759	250,360	938,364	4,650,214

1861	1,052,392	2,144,373	280,256	135,096	895,518	4,507,635
1862	1,569,674	2,494,036	364,877	167,927	1,002,271	4,598,785
1863	1,628,688	2,236,075	319,432	172,278	1,201,219	5,557,692
1864	1,478,921	1,572,836	282,354	143,984	1,374,846	4,852,941
1865	1,467,315	1,696,091	281,832	154,968	1,129,448	4,729,654
1866	1,769,994	1,786,060	302,241	179,878	1,737,047	5,775,220
1867	1,744,252	1,438,517	320,844	319,880	1,964,832	5,688,325
1868	1,958,309	1,442,147	373,262	324,064	2,344,443	6,442,225
1869	1,855,930	1,314,071	342,239	268,970	2,077,870	5,850,080
1870	1,916,511	1,309,153	352,497	271,856	3,333,752	6,173,769
1871	1,941,297	1,863,868	336,288	288,428	2,038,007	6,467,888
1872	1,950,798	1,683,962	325,564	298,758	2,414,288	6,673,370
1873	1,582,072	1,750,418	267,820	172,990	2,591,482	6,364,782
1874	1,482,753	1,772,583	246,697	132,181	2,170,374	5,804,588
1875	1,250,546	1,311,613	275,731	110,141	1,911,827	4,859,858
1876	1,175,313	1,067,497	180,201	64,943	1,684,175	4,172,129
1877	1,312,526	1,522,317	184,218	83,010	1,853,892	4,955,963
1878	1,364,120	1,921,236	220,063	138,064	1,527,837	5,171,320
1879	1,368,849	1,850,347	255,303	237,071	1,650,802	5,362,372
1880	1,566,764	2,408,358	278,114	355,165	1,849,255	6,457,656
1881	1,652,543	1,171,400	250,961	325,775	1,778,513	5,179,192
1882	1,771,743	1,173,257	187,535	283,174	2,051,714	5,467,423
1883	1,828,643	1,394,581	242,649	310,844	1,887,339	5,664,056
1884	1,671,706	1,264,237	205,013	300,480	1,568,052	5,009,488
1885	1,595,632	1,108,711	194,714	220,237	1,612,490	4,731,784

The tons of the total movement of articles on all the canals — (Concluded).

YEARS.	Products of the forest.	Agriculture.	Manufactures.	Merchandise.	Other articles.	Total.
1886	1,523,496	1,537,331	165,760	397,249	1,670,146	5,293,982
1887	1,529,809	1,590,509	212,216	378,734	1,842,537	5,553,805
1888	1,389,728	1,177,587	153,905	206,437	2,015,291	4,942,948
1889	1,567,311	1,330,231	161,074	262,818	2,048,935	5,370,369
1890	1,397,862	1,201,916	139,310	769,672	1,737,342	5,246,102
1891	1,206,986	1,171,192	109,387	250,083	1,825,824	4,563,472
1892	1,249,381	1,038,851	125,781	292,468	1,575,514	4,281,995

Total tons of each class of articles which came to the Hudson river from Erie and Champlain canals, from 1837 *to* 1892, *both inclusive, were as follows:*

YEARS.	Product of the forest.	Agriculture.	Manufactures.	Merchandise.	Other articles.	Total tons.
1837	385,017	151,469	10,124	394	64,777	611,781
1838	400,877	182,142	8,487	298	48,677	640,481
1839	377,720	163,785	8,565	499	51,559	602,128
1840	321,709	302,356	8,665	104	36,178	669,012
1841	449,095	270,240	17,891	155	36,953	774,334
1842	321,480	293,177	16,015	185	35,769	666,626
1843	416,173	346,140	29,493	201	44,854	836,861
1844	545,202	383,363	39,957	246	62,627	1,031,395
1845	607,930	447,627	49,812	253	99,321	1,204,943
1846	603,010	628,454	46,076	1,797	82,982	1,362,319
1847	666,113	897,717	51,532	4,831	124,090	1,744,283
1848	603,272	685,896	44,867	6,343	107,527	1,447,905
1849	665,547	769,600	44,288	5,873	94,638	1,579,949
1850	947,768	926,048	39,669	7,105	113,273	2,033,863
1851	913,268	891,420	52,302	4,580	115,581	1,977,151
1852	1,064,677	989,268	47,512	10,605	122,760	2,234,822
1853	1,340,261	932,189	52,817	12,633	167,897	2,505,797
1854	1,103,018	846,447	40,082	14,632	219,564	2,223,743
1855	877,805	782,604	44,844	15,559	174,781	1,895,593
1856	858,771	1,023,417	50,454	14,073	176,754	2,123,469
1857	798,986	561,894	55,611	16,987	183,709	1,617,187
1858	817,613	929,789	74,981	15,233	147,526	1,985,142
1859	1,123,607	610,317	63,079	15,804	308,865	2,121,672
1860	1,137,873	1,373,393	66,969	11,235	265,407	2,854,877

Total tons of each class of articles which came to the Hudson river from Erie and Champlain canals — (Concluded).

YEARS.	Product of the forest.	Agriculture.	Manufactures.	Merchandise.	Other articles.	Total tons.
1861	690,586	1,934,247	43,074	8,405	303,832	2,980,144
1862	968,062	2,152,159	45,502	5,470	231,516	3,402,709
1863	1,049,559	1,898,253	56,268	5,123	265,524	3,274,727
1864	1,106,148	1,320,562	79,480	3,469	295,598	2,805,257
1865	1,051,616	1,379,331	58,211	4,302	236,721	2,730,181
1866	1,329,884	1,542,035	60,180	6,372	367,136	3,305,607
1867	1,359,287	1,143,712	77,250	5,196	444,250	2,029,695
1868	1,459,353	1,229,554	89,814	5,058	453,370	3,237,149
1869	1,453,419	1,087,105	84,623	4,122	465,873	3,096,142
1870	1,465,517	1,049,586	91,166	12,118	537,915	3,156,302
1871	1,347,979	1,571,754	94,911	7,603	473,554	3,495,801
1872	1,467,865	1,490,248	80,936	7,672	601,223	3,647,944
1873	1,308,471	1,421,469	46,421	12,091	588,197	3,376,649
1874	1,192,681	1,470,872	49,426	12,905	497,228	3,223,112
1875	813,275	1,175,495	70,209	8,341	541,457	2,608,777
1876	890,725	906,483	44,268	4,364	580,342	2,426,182
1877	978,366	1,362,700	53,545	5,341	586,860	2,986,812
1878	1,120,666	1,833,266	56,108	7,367	619,694	3,637,101
1879	1,043,970	1,710,539	46,928	15,299	469,440	3,286,176
1880	1,202,207	2,090,283	39,397	30,264	705,251	4,067,402
1881	1,367,938	1,165,347	53,013	15,466	464,085	3,065,839
1882	1,397,816	1,024,318	61,876	24,154	559,988	3,068,152
1883	1,403,174	1,234,463	47,910	27,798	449,152	3,162,497
1884	1,097,450	1,054,041	56,899	45,538	377,259	2,631,190
1885	1,284,213	949,870	61,912	48,185	371,039	2,715,219

1886	1,202,190	1,400,301	50,704	65,988	495,708	3,215,177
1887	1,206,279	1,412,166	52,566	21,710	466,202	3,158,923
1888	1,074,279	972,746	73,027	20,364	444,245	2,584,661
1889	1,065,747	976,660	75,250	16,428	489,751	2,623,836
1890	1,086,408	901,407	65,098	524,179	447,673	3,024,765
1891	817,228	980,612	51,524	53,924	383,549	2,286,855
1892	997,436	865,958	71,380	53,946	347,799	2,336,519

Exports of flour, wheat and corn from New York, Baltimore, Philadelphia, Boston, New Orleans and Montreal, and the percentage of the exports from each port.

	Flour, barrels.	Wheat, bushels.	Corn, bushels.	PERCENTAGE OF TOTAL EXPORTS AT PLACES NAMED.		
				Flour.	Wheat.	Corn.
	1880.	1880.	1880.			
New York	4,215,415	61,909,929	49,875,430	56.2	49.3	43.9
Boston	1,105,473	3,513,817	11,454,256	14.7	02.8	10.0
Philadelphia	288,656	12,342,492	18,172,396	03.8	09.9	16.0
Baltimore	525,985	33,678,376	15,244,895	07.0	26.8	13.4
Montreal	729,007	9,084,266	7,622,161	09.9	07.1	06.8
New Orleans	626,418	5,169,497	11,177,045	08.4	04.1	09.9
Total	7,500,950	125,698,377	113,546,183			
During the year 1880 the canals carried through freight going east	17,166	29,285,366	39,154,785	00.2	23.2	34.4
	1881.	1881.	1881.			
New York	4,507,052	41,788,708	31,614,480	59.9	48.2	42.7
Boston	1,109,583	3,081,232	8,038,627	14.8	03.6	10.8
Philadelphia	190,842	8,860,522	6,799,457	02.5	10.2	09.2
Baltimore	437,701	19,682,935	12,650,303	05.8	22.7	17.2
Montreal	632,821	6,554,622	3,359,084	08.4	07.6	04.5
New Orleans	642,460	6,707,982	11,508,685	08.6	07.7	15.6
Total	7,520,459	86,676,001	73,970,636			

During the year 1881 the canals carried through freight going east	....	12,146,166	15,056,571	......	14.0	20.3
	1882.	1882.	1882.			
New York	4,619,499	37,020,103	9,012,373	55.5	50.8	50.7
Boston	1,468,146	2,843,058	2,100,503	17.6	04.0	11.8
Philadelphia	246,147	5,759,947	839,024	02.9	07.9	04.8
Baltimore	490,734	17,465,976	1,126,055	05.9	23.8	06.4
Montreal	775,862	6,913,290	672,850	09.3	09.5	03.7
New Orleans	729,749	2,890,698	4,024,325	08.8	04.0	22.6
Total	8,330,137	72,893,072	17,775,130			
During the year 1882 the canals carried through freight going east	....	18,901,666	7,270,607	......	25.9	40.9
	1883.	1883.	1883.			
New York	4,330,146	20,049,200	22,222,754	56.3	43.6	44.5
Boston	1,766,172	694,384	4,634,509	22.9	01.5	09.3
Philadelphia	362,877	4,372,777	5,435,642	4.7	09.5	10.9
Baltimore	441,477	15,245,868	10,012,247	5.7	33.1	20.1
Montreal	776,242	5,008,167	4,530,731	10.1	10.9	9.1
New Orleans	22,061	651,430	3,061,224	.3	1.4	6.1
Total	7,698,975	46,021,826	49,897,107			
During the year 1883 the canals carried through freight going east	....	16,466,633	16,799,321	......	35.7	33.6

Exports of flour, wheat and corn from New York, etc. — (Continued).

	Flour, barrels.	Wheat, bushels.	Corn, bushels.	PERCENTAGE OF TOTAL EXPORTS AT PLACES NAMED.		
				Flour.	Wheat.	Corn.
	1884.	1884.	1884.			
New York	3,907,021	28,687,362	11,862,158	51.6	49.4	38.5
Boston	2,173,842	1,692,081	4,247,071	28.7	02.9	13.8
Philadelphia	203,460	5,775,658	1,610,392	02.6	09.9	05.2
Baltimore	444,249	16,524 524	5,651,605	05.9	28.4	18.3
Montreal	844,019	3,967,457	3,316,053	11.2	06.9	10.8
New Orleans	Not reported.	1,405,219	4,089,507	......	02.5	13.4
Total	7,572,591	58,052,301	30,776,786			
During the year 1884 the canals carried through freight going east	213	24,322,200	5,638,357	......	......	......
	1885.	1885.	1885.			
New York	3,763,029	16,286,800	26,259,328	45.7	54.9	43.8
Boston	1,972,326	1,062,293	3,647,244	23.9	3.5	6.1
Philadelphia	695,287	3,369,915	6,028,564	8.4	11.1	10.1
Baltimore	1,093,093	4,575,262	13,752,196	13.3	15.1	22.9
New Orleans	25,158	96,930	7,825,641	0.3	0.3	13.1
Montreal	679,426	4,221,283	2,378,827	8.4	15.1	4.0
Total	8,228,319	29,612,483	59,891,800	100.0	100.0	100.0

During the season of 1885 the canals carried through freight going east	296	16,379,100	10,883,500	......	55.3	......
	1890.	1890.	1890.			
New York	3,417,399	12,549,946	24,550,165	......	......	......
Boston	1,289,197	497,889	4,590,085	......	......	......
Philadelphia	844,480	699,274	16,844,797	......	......	......
Baltimore	2,624,282	4,817,614	18,854,951	......	......	......
Montreal	824,952	2,243,666	4,970,236	......	......	......
Total	9,000,210	20,808,389	69,780,234	......	......	......
	1891.	1891.	1891.			
New York	3,978,076	46,514,096	12,819,911	......	......	......
Boston	1,560,673	2,196,782	3,946,411	......	......	......
Philadelphia	1,156,342	6,876,608	2,782,678	......	......	......
Baltimore	2,703,715	16,073,292	4,096,234	......	......	......
Montreal	795,452	6,230,224	2,252,662	......	......	......
New Orleans	52,015	10,336,496	1,912,173	......	......	......
Total	....	....	....			
	1892.	1892.	1892			
New York	6,034,260	45,259,966	18,293,353	......	......	......
Boston	2,090,720	6,375,123	2,811,277	......	......	......
Philadelphia	1,843,647	9,994,024	19,454,590	......	......	......
Baltimore	3,661,623	16,661,559	18,995,907	......	......	......
Montreal	601,243	8,379,562	1,763,854	......	......	......
New Orleans	227,432	14,207,443	7,380,678	......	......	......
Total	....	....	....	......	......	......

ANNUAL STATEMENT *showing the exports of domestic grain and flour from the United States during the year ending December* 31, 1892.

CUSTOMS DISTRICTS FROM WHICH EXPORTED.	BARLEY.		CORN.	
	Bushels.	Dollars.	Bushels.	Dollars.
ATLANTIC PORTS.				
Baltimore, Md	26,785	21,237	18,995,907	9,696,321
Bangor, Me	...	...	...	...
Barnstable, Mass	...	...	...	...
Belfast, Me	...	...	...	...
Boston and Charlestown, Mass	583	200	2,811,277	1,486,400
Brunswick, Ga	...	...	...	...
Charleston, S. C	...	...	...	...
Delaware	...	...	...	...
Gloucester, Mass	...	...	...	...
New Bedford, Mass	...	...	3,542	2,261
Newport News, Va	16,738	11,718	1,026,098	541,136
New York, N. Y	235,206	139,250	18,293,353	10,273,395
Norfolk and Portsmouth, Va	...	...	598,552	318,860
Pamlico, N. C	...	...	...	...
Passamaquoddy, Me	...	...	27,987	15,825
Philadelphia, Pa	2	3	19,454,590	10,085,850
Portland and Falmouth, Me	...	...	...	...
Providence, R. I	...	...	50	23
Richmond, Va	...	...	...	...
St. Augustine, Fla	...	...	...	...
St. Johns, Fla	...	...	...	...

Savannah, Ga.			66	48
Wilmington, N. C				
Wiscasset, Me.				
Total	279,314	172,408	61,211,422	32,420,119
GULF PORTS.				
Brazos de Santiago, Tex.			64,680	53,301
Corpus Christi, Tex.			2,473,788	1,731,642
Galveston, Tex.			144,775	95,925
Key West, Fla			163,315	85,734
Mobile, Ala.			15,841	9,637
New Orleans, La	4	7	7,380,678	3,839,656
Pensacola, Fla.			16,966	7,349
Saluria, Tex.			2,279,190	1,375,857
Total	4	7	12,539,233	7,199,101
PACIFIC PORTS.				
Oregon, Ore				
Puget Sound, Wash			500	244
San Diego, Cal	127	61	746	554
San Francisco, Cal.	1,871,168	967,117	126,159	98,328
Willamette, Ore			1,495	717
Total	1,871,295	967,178	128,900	99,843
NORTHERN BORDER AND LAKE PORTS,				
Buffalo Creek, N. Y.				
Cape Vincent, N. Y.				
Chicago, Ill.			2,251,094	1,090,326

Annual statement showing exports of domestic grain and flour — (Continued).

CUSTOMS DISTRICTS FROM WHICH EXPORTED.	BARLEY.		CORN.	
	Bushels.	Dollars.	Bushels.	Dollars.
NORTHERN BORDER AND LAKE PORTS — (*Continued*).				
Cuyahoga, O				
Detroit, Mich			564,394	255,199
Duluth, Minn				
Huron, Mich			521,600	239,487
Miami, O			244,433	108,800
Montana and Idaho	417	180		
North and South Dakota				
Oswegatchie, N. Y				
Oswego, N. Y				
Sandusky, O			4	2
Superior, Mich			10,099	3,501
Vermont				
Total	417	180	3,591,624	1,697,315
Twelve months ending December 31, 1892	2,151,030	1,139,773	77,471,179	41,416,378

Annual statement showing exports of domestic grain and flour — (Continued).

CUSTOMS DISTRICTS FROM WHICH EXPORTED.	CORN MEAL.		OATS.	
	Barrels.	Dollars.	Bushels.	Dollars.
ATLANTIC PORTS.				
Baltimore, Md	60,214	188,191	172,271	65,602
Bangor, Me	4	14	254	117
Barnstable, Mass				
Belfast, Me				
Boston and Charlestown, Mass	46,774	122,349	73,745	33,009
Brunswick, Ga				
Charleston, S. C				
Delaware				
Gloucester, Mass				
New Bedford, Mass	113	252	735	356
Newport News, Va			1,604,329	609,046
New York, N. Y	163,765	514,177	2,650,659	1,050,070
Norfolk and Portsmouth, Va	214	630	148,000	59,200
Pamlico, N. C				
Passamaquoddy, Me	4	16	500	210
Philadelphia, Pa	10,198	36,106	446,478	175,070
Portland and Falmouth, Me	37	89		
Providence, R. I				
Richmond, Va				
St. Augustine, Fla				
St. Johns, Fla	13	42		
Savannah, Ga	4	8		

Annual statement showing exports of domestic grain and flour—(Continued).

CUSTOMS DISTRICTS FROM WHICH EXPORTED.	CORN MEAL.		OATS.	
	Barrels.	Dollars.	Bushels.	Dollars.
ATLANTIC PORTS—(*Continued*).				
Wilmington, N. C	....	....	....	....
Wiscasset, Me	....	....	....	....
Total	281,340	861,874	5,096,971	1,992,680
GULF PORTS.				
Brazos de Santiago, Tex	126	477	395	271
Corpus Christi, Tex	1,049	3,157	12,550	6,230
Galveston, Tex	270	745	106	43
Key West, Fla	3	16	8,526	3,199
Mobile, Ala	50	153	339	172
New Orleans, La	156	510	9,103	3,728
Pensacola, Fla	....	....	....	....
Saluria, Tex	371	1,096	3,288	2,192
Total	2,025	6,154	34,307	15,835
PACIFIC PORTS.				
Oregon, Ore	....	....	....	....
Puget Sound, Wash	324	1,019	13,544	4,946
San Diego, Cal	9	46	16	8

San Francisco, Cal			69,163	32,488
Willamette, Ore.	278	671		
Total	611	1,736	82,723	37,442
NORTHERN BORDER AND LAKE PORTS.				
Buffalo Creek, N. Y				
Cape Vincent, N. Y				
Chicago, Ill	50	150	35,925	11,855
Cuyahoga, O				
Detroit, Mich	17,028	44,123		
Duluth, Minn			2,733	1,008
Huron, Mich	5,455	16,365	36,200	13,122
Miami, O				
Montana and Idaho	10	60	7,945	3,665
North and South Dakota	733	1,459		
Oswegatchie, N. Y				
Oswego, N. Y				
Sandusky, O				
Superior, Mich	12	48		
Vermont				
Total	23,288	62,205	82,803	29,650
Twelve months ending December 31, 1892	307,264	931,969	5,296,804	2,075,607

Annual statement showing exports of domestic grain and flour — (Continued).

CUSTOMS DISTRICTS FROM WHICH EXPORTED.	OAT MEAL.		RYE.		RYE FLOUR.	
	Pounds.	Dollars.	Bushels.	Dollars.	Barrels.	Dollars.
ATLANTIC PORTS.						
Baltimore, Md	2,404,499	72,300	740,670	601,333	....	....
Bangor, Me	....	....	....	....	....	....
Barnstable, Mass	....	....	....	....	....	....
Belfast, Me	....	....	....	....	....	....
Boston and Charlestown, Mass	7,363,654	188,148	84,749	73,182	25	118
Brunswick, Ga	....	....	....	....	....	....
Charleston, S. C	....	....	....	....	....	....
Delaware	....	....	....	....	....	....
Gloucester, Mass	....	....	....	....	....	....
New Bedford, Mass	....	....	....	....	....	....
Newport News, Va	740,160	18,648	43,415	42,533	....	....
New York, N. Y	2,366,332	56,403	3,254,849	3,103,594	2,578	11,073
Norfolk and Portsmouth, Va	....	....	149,919	109,075	....	....
Pamlico, N. C	....	....	....	....	....	....
Passamaquoddy, Me	600	18	....	....	....	....
Philadelphia, Pa	1,508,882	45,270	26,404	22,817	....	....
Portland and Falmouth, Me	250	16	....	....	....	....
Providence, R. I	....	....	....	....	....	....
Richmond, Va	....	....	....	....	....	....
St. Augustine, Fla	....	....	....	....	....	....
St. Johns, Fla	....	....	....	....	....	....
Savannah, Ga	866	25	....	....	....	....

Wilmington, N. C.	....	....	....	....	....	....
Wiscasset, Me	....	....	....	....	....	....
Total	14,385,243	380,828	4,300,006	3,952,534	2,603	11,191
GULF PORTS.						
Brazos de Santiago, Tex	....	....	....	....	....	....
Corpus Christi, Tex	7,620	391	....	....	....	....
Galveston, Tex	....	....	539	485	....	....
Key West, Fla	....	....	....	....	....	....
Mobile, Ala	....	....	....	....	....	....
New Orleans, La	2,204	104	357,610	328,995	....	....
Pensacola, Fla	....	....	....	....	....	....
Saluria, Tex	....	....	....	....	....	....
Total	9,824	495	358,149	329,480	....	....
PACIFIC PORTS.						
Oregon, Ore	....	....	....	....	....	....
Puget Sound, Wash	....	....	27	23	....	....
San Diego, Cal	6,139	264	2	3	....	....
San Francisco, Cal	35,000	1,134	57,833	36,500	....	....
Willamette, Ore	....	....	....	....	....	....
Total	41,139	1,398	57,862	36,526	....	....
NORTHERN BORDER AND LAKE PORTS.						
Buffalo Creek, N. Y	....	....	....	....	....	....
Cape Vincent, N. Y	....	....	....	....	....	....
Chicago, Ill	....	....	322,650	251,614	....	....

Annual statement showing exports of domestic grain and flour — (Continued).

CUSTOMS DISTRICTS FROM WHICH EXPORTED.	OAT MEAL.		RYE.		RYE FLOUR.	
	Pounds.	Dollars.	Bushels.	Dollars.	Barrels.	Dollars.
NORTHERN BORDER AND LAKE PORTS — (*Continued*).						
Cuyahoga, O						
Detroit, Mich						
Duluth, Minn					2	5
Huron, Mich	101,000	2,400				
Miami, O						
Montana and Idaho						
North and South Dakota					57	172
Oswegatchie, N. Y	9,600	290				
Oswego, N. Y						
Sandusky, O						
Superior, Mich						
Vermont						
Total	110,600	2,690	322,650	251,614	59	177
Twelve months ending Dec. 31,'92.	14,546,806	385,411	5,038,667	4,570,154	2,662	11,368

Annual statement showing exports of domestic grain and flour — (Continued).

CUSTOMS DISTRICTS FROM WHICH EXPORTED.	WHEAT.		WHEAT FLOUR.		TOTAL.
	Bushels.	Dollars.	Bushels.	Dollars.	Dollars.
ATLANTIC PORTS.					
Baltimore, Md	16,661,559	14,436,654	3,661,623	18,836,347	43,917,985
Bangor, Me	....	....	20	100	231
Barnstable, Mass	....	....	160	810	810
Belfast, Me	....	....	....	....	....
Boston and Charlestown, Mass	6,375,123	5,700,327	2,090,720	9,884,810	17,488,543
Brunswick, Ga	....	....	910	4,171	4,171
Charleston, S. C	....	....	35	175	175
Delaware	....	....	1,475	6,343	6,343
Gloucester, Mass	....	....	450	2,000	2,000
New Bedford, Mass	21	19	2,004	9,184	12,072
Newport News, Va	2,323,824	2,119,197	912,619	4,815,731	8,158,009
New York, N. Y	45,259,966	42,143,887	6,034,260	27,302,093	84,593,942
Norfolk and Portsmouth, Va	628,247	624,281	78,918	443,195	1,555,241
Pamlico, N. C	....	....	....	....	....
Passamaquoddy, Me	....	....	265	1,270	17,339
Philadelphia, Pa	9,994,024	8,540,707	1,843,647	9,093,575	27,999,398
Portland and Falmouth, Me	....	....	11,045	61,936	62,041
Providence, R. I	....	....	....	....	23
Richmond, Va	....	....	25,241	112,706	112,706

Annual statement showing exports of domestic grain and flour — (Continued).

CUSTOMS DISTRICTS FROM WHICH EXPORTED.	WHEAT.		WHEAT FLOUR.		TOTAL.
	Bushels.	Dollars.	Bushels.	Dollars.	Dollars.
ATLANTIC PORTS — (*Continued*).					
St. Augustine, Fla.	...	...	38	162	162
St. Johns, Fla.	...	...	53	244	286
Savannah, Ga.	...	...	575	2,827	2,908
Wilmington, N. C.	...	...	51	198	198
Wiscasset, Me	...	...	10	45	45
Total	81,242,764	73,565,072	14,664,119	70,577,922	183,934,628
GULF PORTS.					
Brazos de Santiago, Tex.	...	...	9,328	52,075	106,124
Corpus Christi, Tex.	...	...	6,462	32,317	1,773,737
Galveston, Tex.	377,885	335,197	21,296	98,226	530,621
Key West, Fla.	...	...	104,652	466,262	555,211
Mobile, Ala.	...	...	1,685	8,267	18,229
New Orleans, La.	14,207,443	13,417,615	227,432	993,676	18,584,291
Pensacola, Fla.	...	...	688	24,612	31,961
Saluria, Tex.	...	...	3,796	19,377	1,398,522
Total	14,585,328	13,752,812	375,339	1,694,812	22,998,696

PACIFIC PORTS.					
Oregon, Ore.	407,758	367,731	1,485	7,023	374,754
Puget Sound, Wash.	3,078,530	2,538,884	166,816	629,697	3,174,813
San Diego, Cal.	734	770	178	841	2,547
San Francisco, Cal.	16,327,040	14,292,358	1,078,256	4,680,448	20,108,373
Willamette, Ore.	5,244,729	4,435,842	379,982	1,513,189	5,950,419
Total	25,058,791	21,635,585	1,626,717	6,831,198	29,610,906
NORTHERN BORDER AND LAKE PORTS.					
Buffalo Creek, N. Y	12,900	11,537	....	....	11,537
Cape Vincent, N. Y	56	44	....	....	44
Chicago, Ill.	2,121,739	1,584,718	140,568	630,880	3,569,543
Cuyahoga, O.	....	....	18,406	73,757	73,757
Detroit, Mich	6,996	5,247	45,753	217,602	522,171
Duluth, Minn.	1,160,013	1,003,798	207,326	811,197	1,816,008
Huron, Mich.	....	....	116,353	562,812	834,186
Miami, O.	108,600	80,700	....	....	189,500
Montana and Idaho	272	288	1,522	5,686	9,879
North and South Dakotas	....	....	20	100	1,731
Oswegatchie, N. Y	144,490	127,265	....	....	127,555
Oswego, N. Y.	....	....	....	....	....
Sandusky, O.	....	....	7	40	42

Annual statement showing exports of domestic grain and flour — (Concluded).

CUSTOMS DISTRICTS FROM WHICH EXPORTED.	WHEAT.		WHEAT FLOUR.		TOTAL.
	Bushels.	Dollars.	Bushels.	Dollars.	Dollars.
NORTHERN BORDER AND LAKE PORTS — (*Continued*).					
Superior, Mich	1,076,492	944,237	212,583	1,054,096	2,001,882
Vermont	....	....	....	....	....
Total	4,631,558	3,757,834	742,538	3,356,170	9,157,835
Twelve months ending Dec. 31, '92,	125,518,441	112,711,303	17,408,713	82,460,102	245,702,065

RECEIPTS *by all routes at New York, January* 1 *to November* 30, 1892.

	Hudson.	Erie.	Pennsylvania.	Delaware, Lackawanna and Western.	West Shore and Buffalo.	Lehigh Valley.	Baltimore and Ohio.
Flour, barrels.....	1,603,551	1,367,548	836,051	450,957	737,841	1,394,047	266,647
Meal, barrels	1,255	15,630	108,591	....	440	2,481	35,725
Meal, sacks.......	65,506	123,665	261,860	11,525	5,886	27,104	74,013
Wheat, bushels ...	19,199,300	11,432,875	260,250	246,275	5,856,950	6,850,425	18,200
Corn, bushels.....	7,160,650	4,686,475	1,044,675	567,200	6,270,550	1,866,550	122,550
Oats, bushels	5,486,200	5,916,850	466,600	600,375	8,903,650	4,039,400	111,125
Barley, bushels ...	474,500	359,350	397,700	246,000	575,000	287,300	24,000
Rye, bushels......	715,050	475,550	195,700	69,000	462,675	47,950	17,825
Malt, bushels	1,487,675	763,550	224,500	233,300	350,900	260,500	26,875
Peas, bushels	60,500	180,950	13,200	151,250	139,150	72,700	....
Total grain...	34,583,875	23,815,600	2,602,625	2,113,400	22,558,875	13,424,825	320,575
Flour, bushels	7,215,980	6,153,966	3,762,230	2,029,306	3,320,284	6,273,211	1,199,911
Meal, bushels.....	136,032	309,850	958,084	23,050	13,532	64,132	290,926
Grand total...	41,935,887	30,279,416	7,322,939	4,165,756	25,892,691	19,762,168	1,811,412
Per cent	26.32	19.00	4.59	2.61	16.25	12.40	1.14

Receipts by all routes at New York, January 1 *to November* 30, 1892 — (Concluded).

	Various.	Total rail.	River and coast.	Canal.	Total water.	Total rail and water.
Flour, barrels	105,931	6,762,573	238,261	22,536	260,797	7,023,370
Meal, barrels	808	164,930	2,217	....	2,217	167,147
Meal, sacks	7,228	576,787	7,560	....	7,560	584,347
Wheat, bushels	25,283	43,889,558	12,877	16,566,975	16,579,852	60,469,410
Corn, bushels	48,275	21,766,925	171,348	3,686,200	3,857,548	25,624,473
Oats, bushels	155,875	25,680,075	402	3,827,400	3,827,802	29,507,877
Barley, bushels	6,750	2,370,600	521,986	677,900	1,199,886	3,570,486
Rye, bushels	37,968	2,021,718	34,494	188,300	222,794	2,244,512
Malt, bushels	21,525	3,368,825	62,890	432,400	495,290	3,864,115
Peas, bushels	550	618,300	....	15,700	15,700	634,000
Total grain	296,226	99,716,001	803,997	25,394,875	26,208,872	125,924,873
Flour, bushels	476,690	30,431,578	1,072,175	101,412	1,173,587	31,605,165
Meal, bushels	17,688	1,813,294	23,988	....	23,988	1,827,282
Grand total	790,604	131,960,873	1,900,160	25,496,287	27,396,447	159,357,320
Per cent	0.50	82.81	1.19	16.00	17.19	100.00

RECEIPTS *by all routes at New York, May* 1 *to November* 30, 1892.

	Hudson.	Erie.	Pennsylvania.	Delaware, Lackawanna and Western.	West Shore and Buffalo.	Lehigh Valley.	Baltimore and Ohio.
Flour, barrels	1,067,642	984,071	536,428	333,043	400,228	1,019,683	164,721
Meal, barrels......	585	12,089	71,650	....	120	442	24,895
Meal, sacks	48,186	89,018	130,599	7,264	3,086	8,264	52,014
Wheat, bushels....	14,820,050	7,677,625	83,250	60,275	4,008,200	5,172,675	14,450
Corn, bushels	5,296,775	1,925,925	508,375	53,375	919,950	749,000	43,500
Oats, bushels......	3,688,350	3,700,800	301,575	411,775	5,903,475	2,875,000	32,200
Barley, bushels....	47,000	72,850	24,200	5,250	341,000	53,300	1,500
Rye, bushels......	191,150	405,800	81,775	10,100	12,400	23,925	....
Malt, bushels	908,550	563,675	173,250	146,175	179,725	169,275	13,550
Peas, bushels	23,100	53,350	1,650	98,450	48,950	39,700	....
Total grain ...	24,974,975	14,400,025	1,174,075	785,400	11,413,700	9,082,875	105,200
Flour, bushels.....	4,804,389	4,428,319	2,413,926	1,498,693	1,801,024	4,588,578	741,244
Meal, bushels	98,712	226,392	547,798	14,528	6,652	18,296	203,608
Grand total...	29,878,076	19,054,736	4,135,799	2,298,621	13,221,378	13,689,749	1,050,052
Per cent	27.16	17.32	3.76	2.09	12.02	12.44	0.95

Receipts by all routes at New York, May 1 to November 30, 1892 — (Concluded).

	Various.	Total rail.	River and coast.	Canal.	Total water.	Total rail and water.
Flour, barrels	44,574	4,550,390	128,159	22,536	150,695	4,701,085
Meal, barrels	683	110,464	1,587	....	1,587	112,051
Meal, sacks	5,678	344,109	4,066	....	4,066	348,175
Wheat, bushels	3,745	31,840,270	9,709	16,566,975	16,576,684	48,416,954
Corn, bushels	11,075	9,507,975	6,536	3,686,200	3,692,736	13,200,711
Oats, bushels	10,325	16,923,500	402	3,827,400	3,827,802	20,751,302
Barley, bushels	....	545,100	238,761	677,900	916,661	1,461,761
Rye, bushels	15,040	740,190	33,994	188,300	222,294	962,484
Malt, bushels	9,225	2,163,425	54,390	432,400	486,790	2,650,215
Peas, bushels	550	265,750	....	15,700	15,700	281,450
Total grain	49,960	61,986,210	343,792	25,394,875	25,738,667	87,724,877
Flour, bushels	200,583	20,476,758	576,716	101,412	678,128	21,154,886
Meal, bushels	14,088	1,130,074	14,480	....	14,480	1,144,554
Grand total	264,631	83,593,042	934,988	25,496,287	26,431,275	110,024,317
Per cent	0.24	75.98	0.85	23.17	24.02	100.00

EXPORTS *of cereals, etc., from undermentioned Atlantic ports, from January* 1 *to November* 30, 1892.

	From New York.	From Boston.	From Philadelphia.	From Baltimore.	From Montreal.
Flour, barrels	5,428,068	1,858,728	1,674,170	3,307,955	601,243
Corn meal, barrels	149,403	38,611	9,668	58,380	....
Wheat, bushels	42,889,533	6,120,068	9,361,534	14,919,224	8,379,562
Corn, bushels	17,014,352	2,458,630	19,076,582	18,302,253	1,763,854
Oats, bushels	2,620,749	73,595	446,478	172,271	5,930,750
Barley, bushels	234,576	583	2	26,785	403,978
Rye, bushels	3,181,261	84,749	26,404	723,527	160,391
Peas, bushels	663,927	601,636	2,500	5,950	2,368,337
Total grain, bushels	66,604,398	9,339,261	28,913,500	34,150,010	19,006,872
Flour, to bushels	24,426,306	8,364,276	7,533,765	14,885,798	2,705,594
Meal, to bushels	597,612	154,444	38,672	233,520	....
Grand total, bushels	91,628,316	17,857,981	36,485,937	49,269,328	21,712,466

EXPORTS *of cereals, etc., from undermentioned Atlantic ports, from May* 1 *to November* 30, 1892.

	From New York.	From Boston.	From Philadelphia.	From Baltimore.	From Montreal.
Flour, barrels	3,498,095	1,201,657	972,871	1,998,477	601,243
Corn meal, barrels	100,534	29,149	7,687	31,830	....
Wheat, bushels	30,494,549	3,749,705	7,454,800	10,049,585	8,379,562
Corn, bushels	7,566,289	1,582,500	5,261,050	3,701,952	1,763,854
Oats, bushels	1,313,472	62,621	96,309	169,921	5,930,750
Barley, bushels	27,110	....	....	....	403,978
Rye, bushels	979,174	3,563	26,404	436,195	160,391
Peas, bushels	237,430	137,307	....	....	2,368,337
Total grain, bushels	40,618,024	5,535,696	12,838,563	14,357,653	19,006,872
Flour, to bushels	15,741,428	5,407,457	4,377,920	8,993,147	2,705,594
Meal, to bushels	402,136	116,596	30,748	127,320	....
Grand total, bushels	56,761,588	11,059,749	17,247,231	23,478,120	21,712,466

STATEMENT *showing the various tonnage of the boat sregistered in each of the last forty-eight years, and the progressive increase of their capacity.*

TONNAGE.	Inventory of all boats to Jan'y, 1884.	NEW BOATS REGISTERED.									
		1844.	1845.	1846.	1847.	1848.	1849.	1850.	1851.	1852.	1853.
280	....	....	....	....	....	....	....	....	....	....	....
250	....	....	....	....	....	....	....	....	....	....	3
240	....	....	....	....	....	....	....	....	....	....	1
230	....	....	....	....	....	....	....	....	....	....	....
225	....	....	....	....	....	....	....	....	....	....	....
220	....	....	....	....	....	....	....	....	....	....	1
200	....	....	....	....	....	....	....	....	....	....	5
190	....	....	....	....	....	....	....	....	....	....	....
180	....	....	....	....	....	....	....	....	....	....	....
170	....	....	....	....	....	....	....	....	1	....	....
160	....	....	....	....	....	....	....	....	....	....	....
150	....	....	....	....	....	....	....	2	....	1	6
140	....	....	....	....	....	....	....	....	....	....	....
135	....	....	....	....	....	....	....	....	....	....	....
130	....	....	....	....	....	....	1	....	1	2	7
125	....	....	....	....	....	....	....	....	1	....	18
120	....	....	....	....	....	....	1	....	2	....	16
115	....	....	....	....	....	....	....	....	....	....	10
110	....	....	....	....	....	....	....	....	....	....	16
105	....	....	....	....	....	....	....	....	....	....	....
100	....	....	....	....	....	....	2	13	27	34	79

Statement showing the various tonnage of the boats registered in the last forty-eight years — (Continued).

TONNAGE.	Inventory of all boats to Jan'y, 1884.	New Boats Registered.									
		1844.	1845.	1846.	1847.	1848.	1849.	1850.	1851.	1852.	1853.
95	....	....	1	1	6	....	4	6	23	63	180
90	2	1	4	6	27	10	4	25	72	99	164
85	1	....	1	1	45	21	13	16	11	22	22
80	3	9	13	100	560	143	78	38	28	26	33
75	14	33	60	186	553	158	75	17	22	10	15
70	175	124	107	123	162	59	20	20	18	9	6
65	295	94	54	26	44	13	2	4	1	4	3
60	526	71	33	9	30	25	7	3	2	2	2
55	256	15	4	1	13	8	....	....	....	....	.....
50	457	14	5	3	4	2	2	4	1	6	3
45	158	1	2	1	3	4	....	....	1	....	.....
40	148	....	....	3	4	1	....	3	1	....	.....
35	33	1	1	....	3	....	....	....	1	....	.....
30	34	11	1	2	3	6	4	....	....	....	.....
25	10	3	....	4	3	....	....	....	....	....	.....
20	8	....	3	3	2	....	2	....	....	....	.....
15	3	1	....	....	1	1	....	....	....	....	.....
10	4	....	1	2	3	1	....	....	....	2	.....
5	....	....	4	....	....	....	....	1	....	....	.....
2	....	....	3	....	....	...	....	....	....	....	.....
	2,126	378	297	477	1,466	457	215	152	213	271	590

Statement showing the various tonnage of the boats registered in the last forty-eight years — (Continued).

TONNAGE.	NEW BOATS REGISTERED.													
	1854.	1855.	1856.	1857.	1858.	1859.	1860.	1861.	1862.	1863.	1864.	1865.	1866.	1867.
280	....	....	....	....	....	....	....	....	2	....	....	....	....	....
250	1	....	1	1	1	2	2	16	3	....	....	4	8	2
240	....	1	2	....	....	....	....	7	1	....	1	3	40	47
230	....	....	....	....	....	....	....	....	28	3	3	4	28	42
225	....	....	....	....	....	....	....	....	113	2	11	4	24	29
220	1	....	....	....	....	....	3	55	4	69	30	19	43	47
200	3	4	....	3	3	4	33	176	310	254	98	45	68	56
190	....	....	....	....	....	....	....	....	19	25	3	....	....	5
180	....	....	4	....	7	12	60	51	6	70	7	4	4	....
170	1	....	....	....	15	7	17	9	16	8	....	3	....	....
160	....	....	....	....	....	....	....	....	2	9	2	....	4	....
150	13	2	2	51	46	11	14	27	84	24	24	8	11	12
140	....	....	4	15	5	1	2	19	12	14	15	3	5	7
135	....	....	5	2	....	....	2	1	....	....	....	....	....	....
130	9	43	22	16	4	2	2	3	8	16	3	2	7	20
125	105	18	14	21	15	1	5	6	2	3	5	2	4	4
120	143	125	118	84	13	9	22	15	19	15	6	6	21	16
115	34	17	13	4	....	....	5	1	13	3	4	4	12	....
110	87	12	10	6	3	1	4	6	4	5	2	6	2	....
105	....	....	1	2	....	2	....	....	....	....	....	....	....	....
100	83	28	28	8	25	14	55	69	100	61	38	11	95	114
95	69	40	38	18	15	5	13	20	24	14	38	5	21	....
90	95	58	69	43	16	36	42	42	54	102	66	37	65	83
85	20	16	3	16	5	8	35	30	3	8	4	2	2	....

Statement showing the various tonnage of the boats registered in the last forty-eight years — (Continued).

TONNAGE.	New Boats Registered.													
	1854.	1855.	1856.	1857.	1858.	1859.	1860.	1861.	1862.	1863.	1864.	1865.	1866.	1867.
80	44	28	6	15	22	25	49	37	4	18	19	8	6	22
75	32	43	17	14	14	21	19	....	4	7	1	6	4	7
70	10	23	4	3	7	16	4	7	1	10	7	6	4	4
65	1	2	....	1	3	4	3	2	....	....	....	....	....	....
60	2	4	....	3	18	8	2	6	1	6	6	3	4	2
55	....	....	....	....	....	10	....	....	....	....	....	....	....	....
50	1	3	1	....	7	1	2	2	2	5	1	1	1	1
45	1	....	....	....	1	3	1	....	1	6	3	....	....	....
40	1	....	1	1	3	....	1	1	....	....	....	....	....	....
35	....	....	....	....	....	....	1	....	....	....	....	....	....	....
30	....	....	....	1	....	....	....	....	2	9	....	1	....	....
25	1	1	....	....	3	....	....	1	4	....	1	....	....	....
20	....	1	1	....	....	....	1	1	1	4	1	1	1	....
15	2	1	1	....	1	1	....	....	....	....	....	....	....	....
10	....	....	....	....	....	....	....	....	....	....	....	....	....	....
5	....	....	....	....	....	....	....	....	....	....	....	....	....	....
2	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	760	471	363	328	253	204	400	619	848	770	399	198	484	520

Statement showing the various tonnage of the boats registered in the last forty-eight years — (Continued).

TONNAGE.	NEW BOATS REGISTERED.													
	1868.	1869.	1870.	1871.	1872.	1873.	1874.	1875.	1876.	1877.	1878.	1879.	1880.	1881.
280	....	....	....	....	....	....	....	....	....	....	....	....	1	....
250	3	3	7	5	14	1	6	5	2	....	15	19	63	70
240	49	60	49	44	92	176	111	35	18	14	116	151	223	109
230	61	38	37	18	21	20	16	4	3	....	5	13	23	24
225	44	18	10	7	10	26	2	1	1	1	2	1	10	9
220	27	14	11	4	19	41	4	3	....	1	3	1	15	5
200	32	11	13	6	45	20	20	8	2	1	8	8	17	13
190	....	....	....	....	....	....	....	....	....	....	....	....	....	1
180	....	....	2	....	1	1	....	....	....	....	2	2	....	....
170	....	1	....	....	1	2	....	....	....	....	....	1	....	....
160	2	....	1	2	....	....	3	....	3	1	....	1	....	....
150	7	2	....	....	6	4	....	....	....	1	....	2	6	10
140	7	2	2	....	10	16	7	1	....	....	3	....	1	3
135	....	....	....	....	....	15	....	....	....	....	....	....	....	1
130	5	7	19	13	3	5	1	1	....	....	2	4	4	....
125	2	....	2	1	1	10	5	4	1	1	....	6	19	1
120	6	7	7	2	10	2	2	2	1	1	4	4	8	10
115	....	....	2	1	1	35	3	....	1	1	....	3	2	4
110	2	3	2	1	7	33	15	6	10	6	14	15	....	16
105	....	....	....	....	....	8	....	....	....	....	....	....	....	2
100	40	43	30	28	23	14	13	5	11	31	30	51	31	31
95	7	3	4	3	3	5	6	9	9	1	7	16	4	29
90	27	19	13	13	14	3	8	10	7	6	28	27	5	8

Statement showing the various tonnage of the boats registered in the last forty-eight years — (Continued).

TONNAGE.	NEW BOATS REGISTERED.													
	1868.	1869.	1870.	1871.	1872.	1873.	1874.	1875.	1876.	1877.	1878.	1879.	1880.	1881.
85...........	3	2	5	1	4	1	3	3	....	....	1	1	3	....
80...........	7	4	5	2	6	6	3	....	1	....	4	1	1	4
75...........	4	5	4	5	5	6	3	....	....	....	5	7	....	7
70...........	23	23	9	22	12	1	6	....	1	....	14	10	....	....
65...........	....	....	....	....	....	....	....	....	....	....	....	....	....	....
60...........	23	25	31	13	14	....	5	1	1	....	22	19	1	5
55...........	....	....	....	....	....	....	....	....	....	....	....	....	....	....
50...........	6	6	2	....	1	....	3	2	....	....	10	7	....	....
45...........	....	....	....	....	....	1	2	....	....	....	....	....	....	....
40...........	....	....	....	....	....	....	....	....	....	....	....	....	....	1
35...........	....	....	....	....	....	....	....	....	....	....	....	....	....	....
30...........	....	....	....	1	1	1	....	....	3	....	....	1	1	1
25...........	....	....	....	....	....	....	....	1	....	....	3	2	2	1
20...........	....	....	1	....	1	....	2	....	....	1	....	....	....	....
15...........	....	2	1	3	1	....	....	1	1	....	....	1	1	1
10...........	....	....	....	....	....	....	....	....	....	1	1	4	....	....
5...........	....	....	....	....	....	....	....	....	....	1	1	4	....	1
2...........	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	387	298	269	194	326	433	249	....	....	....	....	....	....	....

Statement showing the various tonnage of the boats registered in the last forty-eight years — (Continued).

TONNAGE.	NEW BOATS REGISTERED.										
	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.	1890.	1891.	1892.
280	....	....	....	....	....	10	....	....	....	....	....
250	12	....	24	14	34	15	60	37	67	58	74
240	9	....	4	2	....	9	3	2	....	....	....
230	....	....	....	....	....	1	....	....	....	....	....
225	1	....	....	....	1	....	....	....	....	....	....
220	2	....	....	....	3	5	1	....	....	....	....
200	5	....	....	....	2	1	5	1	....	....	....
190	1	....	....	....	....	....	....	1	....	....	....
180	....	....	....	....	....	....	....	....	....	....	9
170	....	....	....	....	....	....	1	....	....	....	....
160	....	....	....	....	....	....	....	1	....	....	....
150	2	....	....	....	3	2	1	....	1	3	....
140	1	....	1	....	....	....	2	....	....	....	....
135	....	....	1	....	....	....	1	....	....	....	....
130	1	....	....	....	....	....	1	....	....	....	....
125	2	....	....	1	....	....	....	....	....	....	....
120	1	....	....	....	....	....	....	1	....	....	....
115	3	....	....	....	....	2	....	....	....	....	....
110	1	....	1	....	....	1	....	....	1	....	....
105	....	....	1	2	....	1	....	....	....	....	....
100	35	....	14	5	4	7	10	13	....	....	....
95	4	....	9	7	....	4	1	....	7	....	....
90	10	7	4	...	1	1	....	2	....	8	....

Statement showing the various tonnage of the boats registered in the last forty-eight years — (Concluded).

TONNAGE.	New Boats Registered.										
	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.	1890.	1891.	1892.
85	....	....	....	....	1	....	....	....	....	....	.....
80	....	1	....	1	1	....	....	....	1	....	.....
75	....	1	....	....	....	1	....	....	....	....	.....
70	....	1	....	....	....	....	....	....	....	....	.....
65	....	....	....	....	....	....	....	....	....	....	.....
60	1	6	....	....	....	....	....	....	....	....	.....
55	....	....	....	....	....	....	....	....	....	....	.....
50	....	....	....	....	1	....	....	....	....	....	.....
45	....	....	1	....	....	....	....	....	....	....	.....
40	....	....	1	....	....	2	....	....	....	....	.....
35	....	....	....	....	....	....	....	....	....	....	.....
30	....	....	....	....	....	....	....	....	....	....	.....
25	....	....	....	....	1	....	....	....	....	....	.....
20	1	....	....	1	1	....	....	....	....	....	.....
15	....	1	....	....	....	....	....	....	....	....	.....
10	....	1	....	....	....	....	....	....	....	....	.....
5	1	....	1	1	....	....	....	....	....	....	.....
2	....	....	....	....	....	....	....	....	....	....	.....
	....	....	....	....	....	....	....	....	....	....	.....

STATEMENT *of the tons of property moved on each and all the canals, comprising the tons of total movement.*

YEARS.	Erie.	Champlain.	Oswego.	Cayuga and Seneca.	Chemung.	Crooked Lake.
1837	667,151	261,659	161,353	20,274	20,288	24,258
1838	744,848	266,553	222,697	23,541	30,256	30,336
1839	845,007	263,552	221,014	26,300	36,089	26,823
1840	829,960	245,229	219,627	32,486	34,217	24,026
1841	906,442	276,418	135,689	34,634	63,042	33,030
1842	712,310	230,844	129,498	31,716	54,866	18,660
1843	819,216	262,212	240,571	25,998	66,247	31,856
1844	945,944	269,546	326,607	31,099	88,231	32,589
1845	1,038,700	266,922	340,481	46,464	114,740	39,489
1846	1,264,408	280,480	351,511	61,014	124,768	35,556
1847	1,661,575	313,124	441,096	58,204	189,165	36,318
1848	1,599,965	293,889	490,147	46,252	150,691	34,155
1849	1,622,444	321,345	557,637	40,440	135,867	36,317
1850	1,635,089	460,219	583,346	42,379	128,263	38,797
1851	1,955,265	513,793	676,321	37,084	159,563	29,399
1852	2,129,334	531,001	684,191	47,275	187,577	35,757
1853	2,196,308	608,354	761,276	58,793	249,980	53,985
1854	2,224,008	602,913	611,533	72,995	270,978	25,349
1855	2,202,463	537,108	654,399	76,744	223,271	25,850
1856	2,107,678	611,610	657,381	131,907	245,621	28,559
1857	1,566,624	547,236	605,218	120,435	187,201	16,571
1858	1,767,004	608,918	688,960	75,968	205,168	16,318
1859	1,753,954	751,046	612,390	80,602	256,323	17,933
1860	2,253,533	681,157	1,080,076	98,678	226,051	14,723

Statement of the tons of property moved on each and all the canals — (Continued).

YEARS.	Erie.	Champlain.	Oswego.	Cayuga and Seneca.	Chemung.	Crooked Lake.
1861	2,500,782	545,930	852,920	100,992	208,792	12,239
1862	3,204,277	647,318	1,063,413	125,659	243,628	19,632
1863	2,955,302	878,920	992,173	119,704	307,151	11,230
1864	2,535,792	846,790	765,097	185,161	280,834	6,316
1865	2,523,490	815,311	825,649	192,312	164,796	9,376
1866	2,896,027	1,001,493	990,809	368,233	226,510	12,189
1867	2,920,578	1,047,440	940,136	389,704	145,627	6,558
1868	3,346,986	1,120,585	958,444	515,295	165,875	4,451
1869	2,845,072	1,059,339	934,638	533,516	245,761	7,541
1870	3,083,132	1,143,719	917,728	527,728	206,535	15,825
1871	3,580,922	1,099,995	941,858	445,186	173,281	12,024
1872	3,562,560	1,449,528	832,490	386,977	217,263	7,145
1873	3,602,535	1,195,390	655,588	437,382	257,962	12,831
1874	3,097,122	1,268,292	665,408	378,825	205,602	9,286
1875	2,787,226	1,077,746	486,530	224,492	129,425	....
1876	2,418,422	910,151	370,330	137,264	214,448	....
1877	3,254,367	1,021,782	319,327	247,864	12,026	....
1878	3,608,634	1,040,912	257,254	168,201	8,767	....
1879	3,820,027	1,012,005	333,713	117,027	....	....
1880	4,608,651	1,200,503	427,863	125,331	....	....
1881	3,598,721	986,079	394,542	99,617	....	....
1882	3,694,364	1,097,343	445,295	123,488	....	....
1883	3,587,102	1,366,358	276,350	134,631	....	....
1884	3,389,555	1,118,073	265,541	119,990	....	....
1885	3,208,207	1,139,402	213,079	64,125	....	....

1886	3,308,642	1,119,663	186,484	64,995	....	....
1887	3,840,513	1,229,335	176,177	195,933	....	....
1888	3,321,516	1,198,305	134,078	201,237	....	....
1889	3,673,554	1,187,038	170,078	196,138	....	....
1890	3,303,929	1,520,757	225,936	63,419	....	....
1891	3,097,853	1,101,123	161,426	80,954	....	....
1892	2,978,832	1,021,139	90,886	75,669	....	....

Statement of the tons of property moved on each and all the canals — (Continued).

YEARS.	Chenango.	Genesee Valley.	Black River.	Oneida Lake.	Baldwinsville.	Total.
1837	8,213					1,171,296
1838	14,778					1,333,011
1839	16,928					1,435,713
1840	16,848	13,653				1,416,046
1841	23,356	26,892		22,150		1,521,661
1842	17,177	41,860				1,236,931
1843	19,026	48,313		26,445		1,513,439
1844	31,472	65,077		25,991		1,816,586
1845	38,305	73,546		28,808		1,977,565
1846	41,112	87,614		22,188		2,268,662
1847	44,051	95,632		30,642		2,869,810
1848	35,207	98,467		47,451		2,796,230
1849	36,557	84,674		59,451		2,894,732
1850	41,892	89,804		56,828		3,076,617
1851	40,307	100,000	25,320	45,049		3,582,733
1852	44,939	122,901	36,497	43,969		3,863,441
1853	76,538	157,164	41,924	43,351		4,247,853
1854	77,124	158,942	55,525	34,532	31,945	4,165,862
1855	89,390	102,321	51,347	27,116	32,608	4,022,617
1856	105,502	113,731	68,126	18,485	27,481	4,116,082
1857	96,722	114,576	69,135	19,343		3,344,061
1858	72,526	118,303	62,352	19,675		3,665,192
1859	89,691	124,263	75,946	19,536		3,781,684

1860	83,035	123,602	70,687	18,672	....	4,650,214
1861	91,661	94,329	69,930	30,060	....	4,507,635
1862	79,442	129,974	85,442	....	....	5,598,785
1863	90,215	112,549	90,448	....	....	5,557,692
1864	89,021	71,411	72,519	....	....	4,852,941
1865	68,822	56,581	73,317	....	....	4,729,654
1866	107,472	86,579	85,908	....	....	5,795,220
1867	103,064	64,679	70,539	....	....	5,688,325
1868	112,455	138,364	79,770	....	....	6,442,225
1869	83,527	69,141	80,550	....	....	5,859,080
1870	102,820	79,733	96,329	....	....	6,173,769
1871	39,793	85,269	89,560	....	....	6,467,888
1872	26,519	96,112	94,776	....	....	6,673,370
1873	30,317	86,770	86,017	....	....	6,364,782
1874	33,059	69,393	77,601	....	....	5,804,588
1875	23,769	64,677	65,993	....	....	4,859,858
1876	6,227	47,360	67,927	....	....	4,172,129
1877	....	37,311	63,286	....	....	4,955,963
1878	....	18,569	68,983	....	....	5,171,320
1879	....	....	79,600	....	....	5,362,372
1880	....	....	75,308	....	....	6,457,656
1881	....	....	100,233	....	....	5,179,192
1882	....	....	106,933	....	....	5,467,423
1883	....	....	128,656	....	....	5,664,056
1884	....	....	116,359	....	....	5,009,488
1885	....	....	106,971	....	....	4,731,784

Statement of the tons of property moved on each and all the canals — (Concluded).

YEARS.	Chenango.	Genesee Valley.	Black River.	Oneida Lake.	Baldwinsville.	Total.
1886	....	....	114,198	....	....	5,293,982
1887	....	....	111,847	....	....	5,553,805
1888	....	....	118,213	....	....	4,942,948
1889	....	....	143,561	....	....	5,370,369
1890	....	....	132,061	....	....	5,246,102
1891	....	....	122,111	....	....	4,563,472
1892	....	....	115,469	....	....	4,281,995

VALUE *of the total movement of articles on all the canals from* 1837 *to* 1892, *both years inclusive, were as follows:*

YEARS.	Products of the forest.	Agriculture.	Manufactures.	Merchandise.	Other articles.	Total.
1837	$6,146,716	$16,201,331	$6,390,486	$23,935,990	$3,134,766	$55,809,288
1838	6,338,063	19,390,714	5,915,856	31,594,692	2,507,234	65,746,559
1839	7,762,553	17,056,911	5,989,576	39,493,764	3,096,960	73,399,764
1840 (Gen. Val. canal opened)	4,609,035	18,644,481	4,719,054	35,636,943	2,694,379	66,303,892
1841	11,841,103	21,901,713	5,422,615	50,134,320	2,903,178	92,202,929
1842	5,957,219	16,987,843	4,435,289	30,042,153	2,594,104	60,016,608
1843	6,653,080	20,588,118	4,925,545	40,651,798	3,458,368	76,276,909
1844	7,422,737	23,379,643	6,151,806	49,224,099	4,742,867	90,921,152
1845	6,472,237	25,479,488	6,994,932	52,542,336	5,140,866	100,629,859
1846	6,422,409	35,820,586	7,015,311	62,004,488	4,349,315	115,612,109
1847	7,546,063	55,757,166	8,072,059	74,753,638	5,434,502	151,563,428
1848	7,219,350	42,850,086	7,433,957	76,945,463	5,637,301	140,086,157
1849	8,671,057	46,408,092	7,183,930	77,094,282	5,374,924	144,732,285
1850	15,117,661	46,152,958	7,933,108	81,135,199	6,059,003	156,397,929
1851	12,549,754	43,277,458	8,255,575	88,531,320	7,367,694	159,981,801
1852	11,526,436	49,437,555	6,294,120	122,624,170	6,721,236	196,603,517
1853	14,001,506	57,482,815	8,091,100	118,317,856	9,286,293	207,179,570
1854	14,384,785	51,980,864	9,796,420	123,167,863	10,954,380	210,284,312
1855	10,545,615	58,222,314	10,467,559	113,572,523	11,582,136	204,390,147
1856	10,211,383	51,030,453	10,308,419	135,691,816	11,084,991	218,327,062
1857	9,827,410	30,955,369	9,330,067	74,633,905	12,250,267	136,997,018
1858	8,963,443	50,142,318	9,352,955	61,236,319	8,873,809	138,568,844
1859	10,798,769	34,044,601	8,757,059	65,072,972	13,487,357	132,160,758
1860	10,654,710	55,838,977	8,113,177	84,252,425	11,989,909	170,849,198

Value of the total movement of articles on all the canals — (Concluded).

YEARS.	Products of the forest.	Agriculture.	Manufactures.	Merchandise.	Other articles.	Total.
1861	$6,462,614	$57,861,720	$6,718,273	$49,707,729	$9,365,557	$130,115,893
1862	11,305,954	84,239,870	12,314,651	83,640,903	11,733,453	203,234,331
1863	13,421,909	101,090,511	13,044,051	91,417,513	21,072,477	240,046,461
1864	22,589,060	116,051,564	22,582,718	80,391,550	32,785,747	274,400,639
1865	21,011,122	83,670,467	18,095,266	102,627,877	30,832,372	256,237,104
1866	28,754,821	86,610,934	18,389,992	100,169,211	37,038,718	270,963,676
1867	28,977,470	81,616,663	16,877,334	108,545,569	42,939,676	278,956,712
1868	24,039,591	76,383,656	17,298,574	131,786,764	55,793,344	305,301,920
1869	21,930,655	55,528,825	13,595,892	103,464,505	54,761,407	249,281,284
1870	22,266,184	49,231,912	10,777,897	94,852,914	54,707,269	231,836,176
1871	27,309,303	68,130,282	10,881,540	78,898,185	53,548,381	238,767,691
1872	35,599,734	49,541,259	7,659,547	93,997,415	34,115,366	220,913,321
1873	18,651,838	60,194,909	5,979,656	76,173,336	30,715,761	191,715,500
1874	17,840,356	64,344,898	7,094,531	64,477,540	42,916,997	196,674,322
1875	12,478,669	50,540,911	6,311,137	40,885,448	34,792,410	145,008,575
1876	11,132,966	32,439,857	3,375,119	31,069,375	35,073,062	113,090,379
1877	15,574,893	46,765,635	10,911,786	46,130,795	21,028,903	139,411,963
1878	12,703,074	52,264,813	17,834,755	70,433,563	29,021,323	182,254,528
1879	12,053,499	56,826,653	37,173,222	144,653,500	34,573,762	285,280,726
1880	14,351,622	68,994,218	14,236,227	109,870,264	40,392,459	247,844,790
1881	18,399,932	43,440,343	11,863,021	75,331,308	13,148,961	162,153,565
1882	20,285,512	42,766,687	4,673,440	61,769,417	18,423,851	147,918,907
1883	18,038,056	39,727,973	3,426,474	68,281,320	18,387,400	147,861,223
1884	27,588,279	37,335,779	3,125,433	78,864,806	15,182,754	162,097,069
1885	17,302,705	31,404,325	2,827,280	58,215,252	9,786,627	119,536,189

1886	16,471,406	41,191,562	3,310,422	103,749,354	15,339,102	180,061,846
1887	15,568,667	42,729,684	4,808,178	82,161,364	13,978,084	159,245,977
1888	14,899,643	33,546,141	3,207,881	56,913,813	13,957,257	122,524,735
1889	17,012,190	30,014,906	5,908,500	80,590,288	21,058,338	154,584,222
1890	21,888,280	32,690,782	1,879,276	73,838,260	15,464,488	145,761,086
1891	17,923,469	38,566,171	1,147,639	47,008,795	11,623,269	116,269,343
1892	18,571,008	35,127,543	1,491,611	100,701,774	11,705,012	167,596,948

STATEMENT *of total movement of flour, meal and grain on all the canals, from* 1861 *to* 1892.

YEARS.	Barrels wheat flour.	Barrels rye flour.	Barrels corn meal.	Bushels wheat.	Bushels corn.	Bushels oats.
1861	1,667,416	....	2,176	33,171,900	25,024,643	6,105,313
1862	2,102,574	....	18,416	37,579,967	27.225,643	6,550,187
1863	1,930,731	....	44,704	26,577,166	22,287,036	16,040,937
1864	1,474,582	....	51,305	19,932,067	11,086,536	15,122,937
1865	1,271,129	....	24,018	14,433,566	20,689,500	11,973,939
1866	751,870	....	27,972	10,989,800	28,904,143	12,138,250
1867	569,334	....	12,808	13,630,300	17,930,500	10,476,000
1868	575,900	....	14,861	14,425,567	18,437,100	11,927,250
1869	657,870	....	12,666	22,351,133	9,159,643	5,769,312
1870	509,055	....	22,250	21,950,800	6,893,893	7,371,312
1871	381,583	....	6,611	23,951,633	24,002,035	8,118,187
1872	190,129	....	6,046	13,463,433	32,241,179	5,809,938
1873	181,731	....	9,342	26,768,800	22,760,571	4,376,437
1874	269,759	....	8,314	25,738,766	18,542,964	3,713,000
1875	163,287	....	3,000	24,809,766	10,072,536	3,919,813
1876	86,019	....	232	13,879,200	13,044,786	3,259,188
1877	82,621	....	3,120	14,934,766	25,837,786	4,127,812
1878	54,666	....	5,666	28,151,866	26,249,750	5,314,313
1879	66,333	....	8,130	31,648,866	22,185,000	1,447,750
1880	76,537	....	12,620	32,201,733	41,307,821	1,305,812
1881	64,129	....	13,370	14,827,733	16,993,679	1,895,063
1882	86,777	....	17,370	21,407,166	8,988,821	1,386,250
1883	83,768	....	1,777	19,124,666	18,677,785	3,225,438
1884	67,138	....	343	26,346,966	7,079,143	3,293,500
1885	63,602	....	703	18,864,066	12,856,500	514,625
1886	83,296	....	5,435	33,270,966	12,670,178	454,875

1887	37,861	....	65	31,228,000	15,950,607	2,210,312
1888	30,463	....	2,629	19,373,366	17,846,464	4,445,562
1889	40,555	....	1,713	16,137,900	21,162,536	3,980,000
1890	32,046	....	10,740	11,789,700	21,998,000	2,961,437
1891	28,900	....	....	25,203,366	5,076,464	1,022,625
1892	45,176	....	38,000	20,690,933	5,366,750	4,527,750

Statement of total movement of flour, meal and grain on all the canals, etc. — (Concluded).

YEARS.	Bushels barley.	Bushels Rye.	Bushels peas and beans.	Bushels Malt.	Aggregate in tons.
1861	2,444,083	976,000	347,233	....	2,070,251
1862	2,764,916	967,750	375,433	280,182	2,332,928
1863	3,816,458	592,571	530,700	366,242	2,021,505
1864	3,232,292	670,168	550,000	565,294	1,437,598
1865	5,336,416	1,220,714	401,533	725,151	1,530,037
1866	7,867,041	1,751,928	536,667	298,212	1,680,169
1867	4,972,250	1,044,643	827,133	479,818	1,322,774
1868	3,698,083	873,357	391,667	257,029	1,350,090
1869	4,125,500	481,750	379,233	330,400	1,221,397
1870	5,132,958	697,143	226,123	698,686	1,189,267
1871	4,749,662	1,234,392	162,700	801,371	1,759,882
1872	5,002,543	477,036	146,600	1,578,914	1,586,249
1873	2,941,083	1,077,143	393,300	1,182,466	1,660,981
1874	4,110,584	293,393	200,566	453,200	1,500,490
1875	4,353,125	296,750	195,200	71,287	1,238,115
1876	4,020,584	712,464	174,200	1,510,629	991,197
1877	5,810,542	1,283,857	162,533	718,800	1,439,662
1878	3,730,583	2,307,607	167,100	1,031,000	1,846,749
1879	4,006,000	2,114,643	124,466	582,706	1,770,846
1880	4,426,958	940,714	149,369	820,824	2,304,215
1881	3,399,458	553,000	101,334	887,526	1,074,545
1882	4,027,083	1,549,000	206,834	846,824	1,087,953
1883	2,449,291	3,401,643	43,666	952,706	1,329,099
1884	2,708,666	2,552,214	185,735	707,235	1,198,346
1885	2,691,135	364,678	70,000	604,706	1,028,260
1886	2,619,916	108,750	151,366	901,941	1,446,973

1887	3,144,083	239,892	14,133	781,588	1,498,304
1888	873,208	438,143	64,000	940,176	1,116,733
1889	2,754,541	1,289,357	694,333	1,640,588	1,277,118
1890	3,268,321	800,500	66,833	1,201,058	1,158,029
1891	2,995,958	2,456,107	87,996	662,325	1,072,375
1892	2,149,833	151,285	20,633	816,650	922,798

STATEMENT *of foreign exports of flour and grain from New York, from* 1861 *to* 1892.

YEARS.	Barrels wheat flour.	Barrels rye flour.	Barrels corn meal.	Bushels wheat.	Bushels corn.	Bushels oats
1861	3,110,646	11,807	108,385	28,889,914	12,456,265	160,875
1862	2,961,518	8,397	132,606	25,564,755	12,020,848	210,669
1863	2,527,338	5,461	140,561	15,424,889	7,533,431	126,566
1864	1,918,393	2,840	105,142	12,193,433	846,831	42,135
1865	1,402,144	2,673	127,600	2,527,626	2,549,670	94,567
1866	900,084	7,552	149,773	522,669	11,079,394	1,190,583
1867	871,089	11,754	151,669	4,468,774	8,147,813	144,665
1868	1,003,968	7,459	191,011	5,762,037	5,989,225	94,707
1869	1,584,211	5,283	137,627	18,240,586	1,637,586	49,393
1870	1,950,234	....	....	18,446,035	487,792	28,986
1871	1,660,400	4,200	123,500	21,968,600	13,046,600	47,300
1872	1,216,082	6,399	194,040	13,144,400	25,292,200	31,739
1873	1,655,331	8,249	176,756	27,801,800	15,587,500	49,700
1874	2,177,608	8,473	168,603	34,791,249	19,000,995	122,528
1875	1,954,100	5,700	173,400	26,192,700	12,938,700	138,800
1876	1,887,441	5,778	172,042	24,144,033	16,610,232	620,536
1877	1,537,106	7,999	220,939	21,355,774	25,373,942	257,634
1878	2,630,437	4,375	202,788	55,019,389	27,440,771	3,658,905
1879	3,684,366	6,049	150,178	61,538,861	35,319,789	521,406
1880	4,215,415	5,204	203,716	61,908,029	49,875,430	427,959
1881	4,440,114	3,264	196,985	41,798,182	31,731,995	431,426
1882	4,623,956	....	112,316	37,620,153	9,012,373	170,586
1883	4,330,146	....	....	20,049,200	22,222,754	162,655
1884	3,907,021	....	530	28,687,362	11,862,158	2,456,219
1885	3,763,029	3,863	152,488	16,286,800	26,259,228	6,198,302
1886 not reported	....	....	....	....	....	....

1887, to December first only	3,731,523	....	105,735	40,893,437	11,920,425	142,938
1888, to December first only	3,476,991	....	107,589	12,224,374	12,101,098	112,069
1889, to December first only	3,056,855	....	135,006	9,627,444	27,380,443	885,257
1890	3,417,399	....	136,432	12,549,946	24,550,165	9,301,046
1891	3,798,076	....	160,533	46,514,096	12,819,911	3,205,466
1892	6,034,260	....	163,765	45,259,966	18,293,353	2,650,639

Statement showing the lockages at different locks during the year.

CHAMPLAIN.

	Sloop lock.	Junction lock.	No. 5.	Fort Edward.	Whitehall.
May	560	550	1,017	1,009	596
June	485	666	962	1,025	624
July	490	593	951	1,070	632
August	484	664	1,214	1,019	646
September	461	712	983	1,072	623
October	476	947	964	1,318	669
November	587	927	1,155	1,215	523
Total	3,543	5,059	7,246	7,728	4,313

Statement showing the lockages at different locks during the year.

	No. 1, Oswego.	No. 2, Oswego.	No. 23.	No. 45.	No. 51.	No. 66.	No. 72.
May	823	884	....	1,901	1,805	1,820	1,573
June	863	1,037	1,689	1,901	1,649	1,521	1,175
July	852	1,102	1,850	1,896	1,657	1,515	1,377
August	812	1,000	1,765	1,946	1,917	1,858	1,612
September	951	1,368	2,300	1,828	2,282	2,131	1,778
October	976	1,194	2,656	1,817	2,409	2,303	1,810
November	902	932	1,946	1,645	1,773	2,275	1,518
Total	6,179	7,517	12,206	12,934	13,492	13,423	10,843

Statement showing the lockages at different locks during the year.

	Lockport.	Fort Plain.	Tonawanda.	Port Byron.	River lock, upper side cut.	Lower side cut	Lock No. 3, West Troy.
May	1,964	1,807	1,000	1,141	1,332	148	....
June	1,609	1,755	1,167	1,001	1,386	179	1,731
July	1,778	2,034	1,192	1,018	1,204	158	1,671
August	1,974	1,791	1,298	1,153	1,328	131	1,760
September	2,408	2,266	1,358	1,297	1,672	153	2,178
October	2,360	2,581	1,189	1,381	1,777	196	2,442
November	2,240	2,385	1,033	1,071	1,503	192	1,774
Total	14,333	14,619	8,237	8,062	10,202	1,157	11,556

STATEMENT *of the number of clearances issued at each office on all the canals from* 1833 *to* 1892, *inclusive.*

YEARS.	ERIE CANAL.									
	New York.	Albany.	West Troy.	Schenectady.	Fultonville.	Little Falls.	Utica.	Rome.	Syracuse.	Jordan.
1833	......	8,932	6,698	2,296	......	749	2,832	1,488	2,305	....
1834	......	9,283	6,942	3,203	......	860	3,211	1,890	3,048	. . .
1835	......	10,967	7,378	3,868	......	813	3,005	3,007	2,542	....
1836	......	10,235	6,801	3,358	1,142	788	3,403	2,087	2,544	....
1837	......	9,147	6,394	2,000	1,174	768	3,467	1,908	2,892	....
1838	......	9,530	6,530	2,567	977	1,015	3,924	1,804	3,206	....
1839	......	8,331	7,607	4,431	1,027	906	3,322	1,750	3,490	....
1840	......	8,860	6,868	4,678	954	999	2,780	1,688	3,510	....
1841	......	9,620	7,170	2,560	904	1,070	3,155	1,749	4,161	....
1842	......	9,293	7,143	1,235	882	636	3,316	1,423	3,614	....
1843	......	8,600	7,813	1,244	1,025	612	3,564	1,452	3,922	....
1844	......	10,345	9,048	1,073	775	481	3,465	1,497	4,735	....
1845	......	10,240	9,811	1,068	978	542	3,838	1,950	4,447	....
1846	989	10,170	10,308	1,149	912	700	3,889	1,959	4,409	....
1847	1,560	12,637	11,630	1,120	993	683	4,762	2,254	5,710	....
1848	1,141	10,501	11,008	1,194	834	761	4,817	2,332	5,217	....
1849	1,502	10,920	10,840	1,170	738	568	3,325	1,941	3,229	....
1850	2,175	11,694	11,776	1,006	868	585	4,202	2,473	2,935	....
1851	2,634	12,408	11,515	851	696	506	5,013	2,829	2,733	....
1852	2,649	12,687	12,247	976	849	648	3,468	3,645	2,338	....
1853	2,820	13,058	11,988	849	541	534	3,208	5,795	2,554	....
1854	3,219	11,136	9,958	862	493	603	3,975	3,967	4,006	872
1855	2,377	8,676	9,501	881	552	554	3,958	4,196	3,344	588

Statement of the number of clearances issued at each office on all the canals, etc.— (Continued).

YEARS.	ERIE CANAL.									
	New York.	Albany.	West Troy.	Schenectady.	Fultonville.	Little Falls.	Utica.	Rome.	Syracuse.	Jordan.
1856	2,605	7,713	11,996	696	527	503	3,566	2,818	3,993	783
1857	1,724	6,128	8,017	576	444	507	3,441	3,213	4,273	611
1858	1,603	6,859	8,097	435	398	461	3,164	2,923	3,945	617
1859	1,361	6,184	7,349	579	479	453	3,167	3,194	3,80[illegible]	547
1860	2,439	7,524	10,344	541	433	463	3,225	2,883	4,017	....
1861	2,695	6,710	9,358	607	637	534	3,171	2,761	4,728	....
1862	1,311	8,301	11,233	557	518	466	3,148	2,873	5,044	....
1863	1,376	7,242	11,065	509	448	448	3,272	2,981	4,054	....
1864	2,279	6,011	8,649	415	343	345	2,913	2,444	3,500	....
1865	2,787	5,377	7,417	577	316	367	3,054	2,479	3,406	....
1866	3,079	6,392	7,829	644	305	376	3,436	2,957	3,365	....
1867	2,765	6,176	8,578	556	341	362	3,055	2,390	3,712	....
1868	3,052	6,000	7,649	672	384	342	3,003	2,524	4,024	....
1869	2,693	5,685	7,001	676	373	366	3,719	2,701	4,224	....
1870	2,376	5,851	8,331	912	474	370	3,722	2,728	4,459	....
1871	2,473	6,196	7,474	885	419	328	2,408	2,746	4,753	....
1872	4,174	6,1[illegible]1	8,080	985	343	314	2,307	2,551	4,234	....
1873	3,541	5,165	8,098	1,068	393	300	1,977	1,198	5,440	....
1874	2,797	5,228	7,378	857	381	347	2,334	1,865	3,860	....
1875	2,735	3,918	6,425	577	461	272	1,664	1,499	3,430	....
1876	2,319	3,852	6,805	649	448	320	1,202	1,478	3,289	....
1877	4,530	4,361	6,893	....	......	......	1,306	1,361	4,016	....
1878	4,921	5,321	8,182	....	......	......	1,037	1,393	2,975	....

1879	5,777	4,620	7,128	....	......	......	1,020	1,449	3,120	....
1880	6,733	5,478	8,938	....	......	......	1,190	1,545	3,644	....
1881	......	5,515	9,389	....	......	......	2,312	......	3,657	....
1882	......	6,194	10,033	....	......	......	2,397	......	3,798	....
1883	......	6,391	8,976	....	......	......	......	......	4,493	....
1884	......	5,572	8,210	....	......	......	......	......	3,907	....
1885	......	4,753	7,186	....	......	......	......	......	4,753	....
1886	......	5,299	9,707	....	......	......	......	......	4,986	....
1887	......	5,396	9,256	....	......	......	......	......	4,740	....
1888	......	4,254	7,682	....	......	......	......	......	4,765	....
1889	......	4,786	7,810	....	......	......	......	......	6,075	....
1890	......	4,615	8,254	....	......	......	......	......	5,530	....
1891	......	4,355	7,260	....	......	......	......	......	5,326	......
1892	......	3,578	6,799	....	......	......	......	......	5,250	....

Statement of the number of clearances issued at each office on all the canals, etc.— (Continued).

YEARS.	ERIE CANAL.								
	Montezuma.	Lyons.	Palmyra.	Rochester.	Brockport.	Albion.	Medina.	Lockport.	Tonawanda.
1833	2,721	560	638	3,270	841	588	......	782	....
1834	4,660	750	810	4,479	1,018	579	......	924	....
1835	2,340	621	564	4,347	865	586	......	1,230	....
1836	5,441	479	602	4,880	700	437	......	1,060	....
1837	4,682	852	597	4,902	598	597	......	719	....
1838	4,732	615	604	4,379	459	414	......	616	....
1839	4,964	623	681	4,401	546	519	......	872	....
1840	4,988	779	1,169	5,940	625	618	......	687	....
1841	5,336	621	762	6,080	581	750	......	1,423	....
1842	3,927	536	877	6,064	702	876	......	1,113	....
1843	4,034	417	632	5,893	611	744	......	1,162	....
1844	4,350	237	429	5,819	479	481	......	1,002	....
1845	5,036	373	605	6,320	500	545	......	1,188	....
1846	5,179	502	654	7,524	554	646	......	1,452	....
1847	5,720	529	731	8,630	600	731	......	1,545	....
1848	6,111	715	748	7,800	1,076	661	......	2,001	....
1849	4,234	501	683	6,907	3,167	697	......	1,741	....
1850	4,049	444	723	5,642	1,228	748	......	2,060	1,331
1851	3,994	561	729	6,286	874	696	715	1,612	1,979
1852	3,941	502	677	5,476	934	458	728	1,379	2,254
1853	4,183	426	556	5,054	846	283	802	1,283	1,951
1854	5,937	496	432	4,710	466	446	681	1,029	1,607
1855	5,359	550	355	3,861	749	551	1,382	1,103	1,858

1856	4,756	379	464	3,785	588	270	866	889	1,486
1857	4,274	375	370	3,033	413	265	840	861	1,356
1858	3,120	377	361	3,506	383	295	662	878	1,018
1859	3,455	471	415	3,164	419	284	598	819	857
1860	3,787	415	432	3,680	428	444	512	1,030	1,126
1861	3,792	454	362	3,519	386	353	390	998	899
1862	4,441	......	534	3,954	197	400	......	1,030	997
1863	4,735	......	566	4,245	529	462	......	1,304	1,074
1864	4,422	......	433	2,716	383	272	......	1,233	1,084
1865	4,316	......	400	2,225	329	310	......	966	854
1866	5,209	......	423	2,584	247	285	......	977	863
1867	4,572	......	450	2,199	375	339	......	932	896
1868	5,989	......	462	2,769	346	308	......	943	895
1869	5,842	......	513	1,857	301	354	441	732	1,025
1870	6,458	.....	567	1,857	334	317	545	746	1,071
1871	5,808	......	550	1,917	365	347	652	789	1,054
1872	6,640	......	472	1,880	292	264	422	623	1,065
1873	7,486	......	625	2,449	349	351	588	897	1,485
1874	5,924	......	627	1,674	371	357	577	936	1,838
1875	4,792	......	496	1,340	344	369	416	652	1,559
1876	4,342	......	423	1,426	377	335	373	511	1,932
1877	2,832	......	......	1,480	......	......	......	......	2,375
1878	2,829	......	......	1,143	......	......	......	......	2,358
1879	2,239	......	......	858	......	......	......	......	2,758
1880	2,447	......	248	972	......	......	......	......	2,921
1881	.....	......	......	1,479	......	......	......	......	3,422
1882	......	......	......	1,320	......	......	......	......	3,998
1883	......	......	......	1,230	......	......	......	......	3,300
1884	......	......	......	1,523	......	......	......	......	4,065
1885	......	......	......	1,632	......	......	......	......	3,632
1886	......	......	......	1,836	......	......	......	......	2,009

Statement of the number of clearances issued at each office on all the canals, etc.— (Continued).

YEARS.	ERIE CANAL.								
	Montezuma.	Lyons.	Palmyra.	Rochester.	Brockport.	Albion.	Medina.	Lockport.	Tonawanda.
1887	......	......	......	2,144	......	......	......	......	3,652
1888	......	......	......	1,834	......	......	......	......	3,200
1889	......	......	......	2,148	......	......	......	......	3,960
1890	......	......	......	2,878	......	......	......	......	3,655
1891	......	......	......	2,755	......	......	......	......	3,215
1892	......	......	......	2,475	......	......	......	......	3,111

Statement of the number of clearances issued at each office on all the canals, etc.— (Continued).

YEARS.	ERIE.			CHAMPLAIN.					
	Black Rock.	Buffalo.	Total.	Waterford and Sloop lock.	Schuyler-ville.	Fort Edward.	Glens Falls.	Whitehall.	Total.
1833	......	2,774	37,571	2,616	1,349	......	......	2,869	6,834
1834	......	4,008	45,662	3,484	1,498	......	......	3,245	8,228
1835	......	5,173	49,308	3,564	1,606	......	......	3,957	8,127
1836	......	5,816	48,773	2,880	1,580	......	......	3,867	8,325
1837	......	4,755	45,051	1,771	1,414	......	......	3,034	6,319
1838	......	5,970	46,342	1,462	1,411	......	......	3,290	6,163
1839	979	5,013	49,392	1,538	1,493	......	......	3,356	6,387
1840	956	4,851	50,959	952	1,285	......	......	3,802	6,039
1841	1,459	5,685	53,193	1,416	1,653	......	......	3,534	6,603
1842	1,149	5,174	47,959	706	1,434	......	......	3,275	4,709
1843	1,222	5,994	48,942	829	1,242	......	......	3,061	4,303
1844	2,493	6,900	51,609	939	1,401	......	......	3,509	4,911
1845	1,377	6,375	55,190	1,045	1,605	......	......	3,523	5,128
1846	1,535	8,212	60,743	1,415	1,675	......	......	3,515	6,605
1847	1,831	11,136	72,801	1,100	1,759	......	......	4,078	6,937
1848	1,145	9,407	66,462	1,295	1,540	......	......	3,619	6,454
1849	1,504	9,132	60,769	866	775	......	866	3,849	5,996
1850	937	9,805	64,732	814	702	......	1,013	4,429	6,958
1851	999	10,380	68,120	807	908	......	1,101	3,950	6,766
1852	1,243	9,662	66,760	1,205	1,089	......	2,273	4,146	7,714
1853	1,517	9,248	67,497	1,644	1,108	......	1,612	5,501	9,861
1854	1,047	9,833	65,875	1,176	1,123	......	1,515	3,967	7,785

Statement of the number of clearances issued at each office on all the canals, etc.— (Continued.)

YEARS.	ERIE.			CHAMPLAIN.					
	Black Rock.	Buffalo.	Total.	Waterford and Sloop lock.	Schuyler-ville.	Fort Edward.	Glens Falls.	Whitehall.	Total.
1855	1,134	9,874	61,405	1,122	1,264	......	1,210	3,825	7,421
1856	1,143	7,982	57,828	860	1,131	......	1,585	4,049	7,625
1857	......	6,455	47,176	1,929	1,118	......	1,314	3,393	7,754
1858	......	6,306	45,408	2,813	......	2,543	.....	3,451	8,807
1859	......	4,839	42,442	3,160	......	2,691	......	4,041	9,892
1860	......	7,541	51,264	3,658	......	2,576	......	4,061	10,295
1861	......	9,584	51,938	2,796	......	2,487	......	2,539	7,822
1862	......	11,185	56,189	3,704	......	2,341	......	3,573	9,618
1863	......	9,556	53,861	3,643	......	2,864	......	4,361	10,868
1864	......	7,943	45,385	3,473	......	2,760	......	4,099	10,332
1865	......	6,944	42,124	2,668	......	2,632	......	4,016	9,336
1866	......	8,519	47,490	3,600	......	2,791	......	4,979	11,370
1867	......	7,664	45,362	5,184	......	2,784	......	5,179	13,147
1868	......	7,761	47,123	3,916	......	3,228	......	4,812	11,956
1869	......	6,725	45,228	4,564	......	2,632	......	4,671	11,867
1870	......	6,835	47,953	3,718	......	2,380	......	5,356	11,454
1871	......	8,795	48,959	4,651	.....	2,713	......	5,016	12,379
1872	......	8,659	49,416	4,528	......	3,040	......	5,870	13,438
1873	......	9,063	51,473	3,681	......	2,204	......	4,929	10,814
1874	......	7,643	44,994	3,591	......	2,494	......	3,967	10,052
1875	......	6,365	37,284	3,261	......	2,116	......	3,877	9,254
1876	......	4,850	34,931	2,464	......	1,807	......	3,283	7,554

1877	......	6,938	36,092	2,002	......	2,010	......	3,535	7,547
1878	......	9,047	39,206	2,248	......	2,349	......	3,390	7,987
1879	......	8,708	37,677	2,244	......	1,701	......	3,856	7,801
1880	......	10,623	44,739	2,462	......	1,995	......	4,868	9,325
1881	......	6,317	32,091	3,237	......	......	......	3,858	7,095
1882	......	6,613	34,353	3,713	......	......	......	3,949	7,662
1883	......	6,801	......	3,851	......	......	......	3,685	......
1884	......	6,412	29,599	3,474	......	......	......	2,754	6,228
1885	......	5,670	27,626	3,473	......	......	......	2,722	6,195
1886	......	7,414	31,245	3,060	......	......	......	3,114	6,174
1887	......	7,925	36,113	3,001	......	......	......	3,538	6,539
1888	......	5,958	27,693	2,760	......	......	......	2,862	5,622
1889	......	6,855	31,634	3,657	......	......	......	2,859	6,516
1890	......	6,429	31,361	4,523	......	......	......	4,960	9,483
1891	......	6,450	29,361	3,560	......	......	......	4,280	7,840
1892	......	6,325	27,535	2,935	......	......	......	2,054	6,334

Statement of the number of clearances issued at each office on all the canals, etc.—(Continued).

YEARS.	OSWEGO.				CAYUGA AND SENECA.			
	Salina.	Phœnix.	Oswego.	Total.	Seneca Falls.	Geneva.	Ithaca.	Total.
1833	2,825	......	914	3,739	....	1,086	......	....
1834	5,230	......	1,637	6,867	....	1,894	......	....
1835	5,488	......	2,275	7,763	....	1,692	......	....
1836	4,842	......	2,028	6,870	....	1,730	......	....
1837	4,878	......	1,773	6,651	....	1,385	......	....
1838	5,782	......	2,082	7,864	....	1,361	......	....
1839	6,071	......	2,385	8,456	....	1,213	......	....
1840	5,492	......	1,980	7,472	....	1,223	......	....
1841	6,286	......	2,839	9,125	....	1,421	......	....
1842	4,530	......	2,343	6,877	....	1,397	......	....
1843	5,544	......	2,407	7,447	....	1,068	......	....
1844	6,841	......	3,363	10,204	....	1,249	......	....
1845	6,877	......	3,419	10,296	....	1,449	......	....
1846	9,169	......	3,898	11,067	....	1,881	......	....
1847	8,172	......	4,666	12,838	....	1,814	......	....
1848	8,299	.....	4,177	12,406	....	1,632	......	....
1849	3,933	......	3,928	7,861	....	269	......	....
1850	3,773	......	3,978	7,551	....	289	......	....
1851	3,298	......	4,773	8,071	....	1,036	......	....
1852	3,050	......	5,794	7,884	....	954	......	....
1853	3,298	......	5,831	9,129	....	1,016	......	....
1854	5,943	2,372	5,001	13,316	1,002	855	......	1,857
1855	5,463	2,293	5,092	12,848	1,120	851	......	1,971

1856	5,857	2,137	6,833	14,827	845	562	1,032	2,439
1857	4,390	1,414	4,329	10,133	545	640	912	2,097
1858	6,533	1,888	5,117	13,538	594	770	376	1,740
1859	5,667	1,371	3,988	11,026	543	834	341	1,708
1860	6,050	1,985	6,263	14,298	878	1,091	......	1,969
1861	5,720	1,470	5,306	12,496	634	1,017	......	1,651
1862	6,542	1,576	5,483	13,601	....	1,508	......	1,508
1863	6,020	1,258	4,720	11,998	....	1,192	......	1,192
1864	4,528	959	3,767	9,254	....	1,533	......	1,533
1865	4,510	1,011	3,798	9,319	....	2,071	......	2,071
1866	5,136	883	4,273	10,992	....	2,464	......	2,464
1867	4,354	789	4,021	9,164	....	2,385	......	2,385
1868	4,415	813	4,129	9,357	....	3,414	......	3,414
1869	3,832	620	4,012	8,464	....	3,435	......	3,435
1870	3,522	676	3,955	8,153	....	3,217	......	3,217
1871	3,395	692	3,907	7,994	....	2,786	......	2,786
1872	3,710	529	3,303	7,542	....	2,572	......	2,572
1873	3,236	520	2,929	6,685	....	2,648	......	2,648
1874	2,980	564	2,877	6,421	....	2,136	......	2,136
1875	2,007	452	2,035	4,494	....	1,392	......	1,392
1876	2,181	......	1,717	3,898	....	853	......	853
1877	......	......	1,902	1,902	....	1,700	......	1,700
1878	......	......	1,516	1,516	....	1,491	......	1,091
1879	......	......	1,803	1,803	....	751	......	751
1880	......	......	2,241	2,241	....	817	......	817
1881	......	......	2,075	2,075	....	717	......	717
1882	......	......	2,200	2,200	....	745	......	745
1883	......	......	1,809	......	....	797	......	....
1884	......	......	1,265	1,265	....	748	......	748
1885	......	......	1,255	1,255	....	725	......	725
1886	......	......	1,281	1,281	....	680	......	680

Statement of the number of clearances issued at each office on all the canals, etc.— (Continued).

YEARS.	OSWEGO.				CAYUGA AND SENECA.			
	Salina.	Phœnix.	Oswego.	Total.	Seneca Falls.	Geneva.	Ithaca.	Total
1887	......	......	916	916	....	978	......	978
1888	......	......	815	815	....	947	......	947
1889	......	......	940	940	....	1,216	......	1,216
1890	......	......	960	960	....	619	......	619
1891	......	......	952	952	....	710	......	710
1892	......	......	676	676	....	608	......	608

Statement of the number of clearances issued at each office on all the canals, etc. — (Continued).

YEARS.	CHEMUNG.					CROOKED LAKE.			CHENANGO.			
	Havana.	Watkins.	Horse-heads.	Corning.	Total.	Dresden.	Penn Yan.	Total.	Hamilton.	Oxford,	Bingham-ton.	Total.
1833	82	.....	170	.....	1,253	153	.....	153	.....	.....	.....	......
1834	662	.....	595	.....	1,247	406	490	896	.....	.....	.....	......
1835	911	.....	851	.....	1,892	424	651	1,075	.....	.....	.....	......
1836	1,000	.....	951	.....	1,951	512	667	1,779	.....	.....	.....	......
1837	967	.....	737	.....	1,704	448	550	998	183	167	162	517
1838	879	.....	741	.....	1,620	437	521	958	399	304	366	1,069
1839	895	.....	729	.....	1,624	403	527	930	303	369	208	880
1840	798	.....	755	.....	1,553	111	403	814	228	298	237	763
1841	1,153	.....	1,442	.....	3,595	414	476	890	316	422	301	1,039
1842	1,013	.....	1,348	.....	3,361	413	318	731	252	358	205	815
1843	1,119	.....	1,350	.....	3,468	448	516	964	344	343	281	968
1844	1,371	.....	1,679	.....	3,050	447	529	976	262	509	357	1,128
1845	1,534	.....	1,134	.....	3,696	624	571	1,195	258	491	440	1,189
1846	1,515	.....	1,314	1,028	3,699	778	500	1,278	263	430	514	1,207
1847	1,941	.....	1,339	870	4,440	750	510	1,300	425	502	550	1,447
1848	1,884	.....	1,457	1,152	4,569	555	589	1,184	546	493	506	1,545
1849	1,714	.....	1,024	1,228	3,843	559	466	1,025	335	335	319	989
1850	1,714	.....	914	1,105	3,839	560	482	1,042	348	512	435	1,295
1851	1,702	.....	890	1,211	3,828	505	411	916	274	322	311	907
1852	1,814	.....	946	1,235	3,999	418	409	827	488	462	623	1,603
1853	2,224	.....	1,174	1,621	5,019	458	458	916	588	372	802	1,762
1854	2,772	.....	1,700	2,158	6,630	371	334	705	496	482	921	1,899
1855	2,218	.....	1,234	1,815	5,267	367	393	768	697	405	852	1,954
1856	2,548	.....	1,697	1,737	5,082	385	367	752	613	438	872	1,923

Statement of the number of clearances issued at each office on all the canals, etc. — (Continued).

YEARS.	CHEMUNG.					CROOKED LAKE.			CHENANGO.			
	Havana.	Watkins.	Horse-heads.	Corning.	Total.	Dresden.	Penn Yan.	Total.	Hamilton.	Oxford.	Bingham-ton.	Total.
1857	2,343	.....	1,624	1,542	5,509	.....	261	261	601	487	818	1,906
1858	2,230	.....	1,737	1,138	5,105	.....	334	334	403	429	700	1,532
1859	3,027	.....	2,346	1,217	6,590	.....	355	355	603	440	1,014	2,057
1860	2,376	.....	2,052	1,021	5,449	.....	277	277	493	418	984	1,895
1861	2,537	.....	2,149	754	5,440	.....	219	219	473	468	1,027	1,968
1862	2,891	....	1,854	1,039	5,784	.....	388	388	372	385	962	1,719
1863	3,572	.....	1,817	1,442	6,831	.....	318	318	392	447	1,049	1,888
1864	2,966	.....	1,530	1,553	6,049	.....	154	154	512	494	1,029	2,035
1865	1,888	.....	1,028	730	3,646	.....	282	282	451	481	807	1,739
1866	2,445	.....	1,975	456	4,876	.....	364	364	541	509	1,238	2,288
1867	1,660	.....	1,184	617	3,461	.....	217	217	547	546	1,344	2,437
1868	.....	1,191	789	461	2,441	.....	224	224	546	598	1,488	2,632
1869	.....	1,591	778	408	2,777	.....	209	209	437	639	1,802	2,158
1870	....	1,400	445	283	2,128	.....	236	236	551	503	1,306	2,360
1871	.....	1,479	412	276	2,167	.....	210	210	294	141	463	898
1872	.....	1,447	571	338	2,356	.....	117	117	214	169	271	654
1873	.....	1,562	360	258	2,180	.....	201	201	229	269	280	778
1874	.....	1,441	247	197	1,885	.....	130	130	179	214	287	680
1875	.....	896	.....	144	1,040	.....	.....	.....	.....	.....	244	244
1876	.....	1,164	.....	221	1,285	.....	.....	.....	.....	177	.....	177
1877	.....	.....	.....	116	116	.....	.....	.....	.....	.....	.....	......
1878	.....	.....	.....	87	87	.....	.....	.....	.....	.....	.....	......
1879	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	......

1880	......	......	......	......	......	......	......	......	......	......	......	......
1881	......	......	......	......	......	......	......	......	......	......	......	......
1882	......	......	......	......	......	......	......	......	......	......	......	......
1883	......	......	......	......	......	......	......	......	......	......	......	......
1884	......	......	......	......	......	......	......	......	......	......	......	......

Statement of the number of clearances issued at each office on all the canals, etc.— (Continued).

YEARS.	GENESEE VALLEY.						Total.
	Scottsville.	Mt. Morris.	Dansville.	Oramel.	Caneadea.	Olean.	
1833	......	......	......	......	......	......	....
1834	......	......	......	......	......	......	....
1835	......	......	......	......	......	......	....
1836	......	......	......	......	......	......	......
1837	......	......	......	......	......	......	....
1838	......	......	......	......	......	......	....
1839	......	......	......	......	......	......	....
1840	478	......	......	......	......	......	574
1841	1,096	......	......	......	......	......	1,096
1842	1,034	......	531	......	......	......	1,565
1843	1,217	.....	592	......	......	......	1,807
1844	1,297	......	748	......	......	......	2,045
1845	1,411	......	812	......	......	......	2,223
1846	1,474	......	892	......	......	......	2,366
1847	1,309	......	974	......	......	......	2,283
1848	1,284	......	1,105	......	......	......	2,389
1849	1,084	......	1,078	......	......	......	2,162
1850	1,210	......	1,015	......	......	......	2,225
1851	428	355	1,025	329	......	......	2,037
1852	555	261	728	270	......	......	2,014
1853	714	983	686	514	......	......	2,897
1854	614	1,166	453	935	......	......	2,968
1855	432	1,093	441	468	......	......	2,434

1856	509	1,008	379	439	......	......	2,333
1857	402	1,049	319	482	......	153	2,405
1858	338	951	289	415	......	321	2,314
1859	369	827	276	404	......	342	2,233
1860	349	692	259	......	434	429	2,163
1861	293	576	147	......	367	328	1,711
1862	......	882	181	......	527	556	2,146
1863	......	694	140	......	548	570	1,952
1864	......	485	132	......	363	335	1,315
1865	......	477	112	......	278	134	1,001
1866	......	473	151	......	435	378	1,437
1867	......	392	124	......	403	259	1,178
1868	......	577	132	......	503	407	1,619
1869	......	565	125	......	298	297	1,285
1870	......	435	142	......	392	468	1,437
1871	......	344	137	......	323	500	1,304
1872	......	433	119	......	400	492	1,444
1873	......	567	128	......	415	466	1,576
1874	......	582	......	......	312	371	1,265
1875	......	461	......	......	......	405	866
1876	......	435	......	......	......	286	721
1877	......	365	......	......	......	216	581
1878	......	249	......	......	......	117	366
1879	......	......	......	......	......	......	......
1880	......	......	......	......	......	......	......
1881	......	......	......	......	......	......	......
1882	......	......	......	......	......	......	......

Statement of the number of clearances issued at each office on all the canals, etc.— (Continued).

YEARS.	BLACK RIVER.			ONEIDA LAKE.	SENECA RIVER TOWING PATH.	Total.
	Boonville.	Lyons Falls.	Total.	Higgins.	Baldwinsville.	
1833	....	....	....	....	....	49,636
1834	....	....	....	....	....	64,494
1835	....	....	....	....	....	69,767
1836	....	....	....	....	....	68,830
1837	....	....	....	....	....	62,525
1838	....	....	....	....	....	65,377
1839	....	....	....	....	....	68,882
1840	....	....	....	....	....	69,301
1841	....	....	....	574	....	76,526
1842	....	....	....	1,101	....	67,515
1843	....	....	....	1,250	....	69,720
1844	....	....	....	1,237	....	76,409
1845	....	....	....	1,260	....	81,629
1846	....	....	....	1,089	....	89,933
1847	....	....	....	1,307	....	105,198
1848	....	....	....	1,677	....	98,325
1849	....	....	....	2,304	....	75,648
1850	....	....	....	393	....	29,184
1851	530	....	530	695	....	92,926
1852	609	....	609	1,187	....	93,842
1853	674	....	674	1,073	....	109,148
1854	817	....	817	2,563	491	104,902
1855	933	....	933	2,393	470	97,856
1856	834	....	834	3,177	494	98,214

1857	900	....	900	1,284	....	79,425
1858	868	....	868	1,339	....	80,985
1859	989	....	989	1,072	....	78,354
1860	904	....	904	672	....	89,186
1861	917	....	917	472	....	84,634
1862	1,019	....	1,019	....	....	91,972
1863	1,157	....	1,157	....	....	90,065
1864	924	....	924	....	....	76,981
1865	931	....	931	....	....	70,449
1866	1,153	....	1,153	....	....	81,734
1867	1,065	....	1,065	....	....	78,416
1868	818	313	1,131	....	....	79,897
1869	795	440	1,235	....	....	76,658
1870	776	577	1,353	....	....	78,291
1871	577	604	1,181	....	....	77,878
1872	599	668	1,267	....	....	78,806
1873	427	590	1,017	....	....	77,372
1874	835	....	835	....	....	68,398
1875	754	....	754	....	....	55,328
1876	824	....	824	....	....	50,243
1877	734	....	734	....	....	48,672
1878	776	....	776	....	....	51,029
1879	873	....	873	....	....	48,905
1880	1,039	....	1,039	....	....	58,161
1881	1,098	....	1,098	....	....	43,076
1882	1,224	....	1,224	....	....	46,184
1883	1,406	....	....	....	....	42,739
1884	1,269	....	1,269	....	....	....
1885	....	....	....	....	....	....
1886	1,213	....	1,213	....	....	40,587
1887	1,175	....	1,175	....	....	42,721

Statement of the number of clearances issued at each office on all the canals, etc.—(Concluded).

YEARS.	BLACK RIVER.			ONEIDA LAKE.	SENECA RIVER TOWING PATH.	Total.
	Boonville.	Lyons Falls.	Total.	Higgins.	Baldwinsville.	
1888	1,109	....	....	....	....	36,246
1889	1,350	....	....	....	....	41,656
1890	1,016	....	1,016	....	....	43,439
1891	1,124	....	1,124	....	....	39,987
1892	1,096	....	1,096	....	....	35,200

The following table gives the number of boats registered each year since 1844, *the total tonnage each year, and the average tonnage of each boat registered.*

YEARS.	Boats.	Tons.	Average of boats.
1844	378	24,360	64 tons.
1845	297	19,781	67 do
1846	477	34,630	73 do
1847	466	110,745	76 do
1848	457	33,815	74 do
1849	215	16,370	76 do
1850	152	12,260	80 do
1851	213	18,450	87 do
1852	271	23,945	88 do
1853	590	57,280	97 do
1854	760	80,365	105 do
1855	471	48,220	102 do
1856	364	38,990	107 do
1857	329	37,510	114 do
1858	255	27,830	109 do
1859	206	20,150	98 do
1860	403	48,355	120 do
1861	619	95,230	154 do
1862	850	142,470	168 do
1863	771	119,170	177 do
1864	399	56,235	141 do
1865	200	28,795	144 do
1866	485	74,630	154 do
1867	520	80,360	155 do
1868	387	64,470	167 do
1869	298	46,650	157 do
1870	269	42,365	157 do
1871	194	29,225	151 do
1872	326	57,925	178 do
1873	433	79,740	184 do
1874	239	45,960	183 do
1875	102	17,435	171 do
1876	75	10,825	144 do
1877	69	9,185	133 do
1878	300	48,365	161 do
1879	382	64,645	169 do
1880	439	93,285	212 do
1881	368	69,065	188 do
1882	93	13,275	143 do
1883	76	11,361	149 do
1884	60	9,999	166 do
1885	34	5,596	164 do
1886	53	11,005	208 do

Number of boats registered since 1844, *tonnage, etc.*— (Concluded).

YEARS.	Boats.	Tons.	Average of boats.
1887	157	34,298	218 tons.
1888	85	18,753	220 do
1889	58	11,918	205 do
1890	77	17,672	229 do
1891	52	11,648	224 do
1892	35	7,394	211 do

Total tonnage of all the property on the canals, ascending and descending, and the value for the fifty-five years preceding, is as follows:

YEARS.	Tons.	Value.
1837	1,171,296	$55,809,288
1838	1,333,011	65,746,559
1839	1,435,713	73,399,764
1840	1,416,046	66,303,892
1841	1,521,661	92,202,929
1842	1,236,931	60,016,608
1843	1,513,439	76,276,909
1844	1,816,586	90,921,152
1845	1,977,565	100,629,859
1846	2,268,662	115,612,109
1847	2,869,810	151,563,428
1848	2,796,230	140,086,157
1849	2,894,732	144,732,285
1850	3,076,617	156,397,929
1851	2,582,733	159,981,801
1852	3,863,441	196,603,517
1853	4,247,853	207,179,570
1854	4,165,862	210,284,312
1855	4,022,617	204,390,147
1856	4,116,082	218,327,062
1857	3,344,061	136,997,018
1858	3,665,192	138,568,844
1859	3,781,684	132,160,758
1860	4,650,214	170,849,198
1861	4,507,635	130,115,893
1862	5,598,785	203,234,331
1863	5,557,692	240,046,461
1864	4,852,941	274,400,639
1865	4,729,654	256,237,104
1866	5,775,220	270,963,676
1867	5,688,325	278,956,712
1868	6,442,225	305,301,929
1869	5,859,080	249,281,284
1870	6,173,769	231,836,176
1871	6,467,888	238,767,691
1872	6,673,370	220,913,321
1873	6,364,782	191,715,500
1874	5,804,588	196,674,322
1875	4,859,958	145,008,575
1876	4,172,129	113,090,379
1877	4,955,963	128,923,890
1878	5,171,320	182,254,528
1879	5,362,372	285,280,726
1880	6,457,656	247,844,790

Total tonnage of all the property on the canals, ascending and descending, and the value for the fifty-five years preceding, is as follows — (Concluded).

YEARS.	Tons.	Value.
1881	5,179,192	$162,153,565
1882	5,467,423	147,918,907
1883	5,664,056	147,861,223
1884	5,009,488	162,097,069
1885	4,731,784	119,536,189
1886	5,293,982	480,061,846
1887	5,553,805	159,245,977
1888	4,942,948	122,524,735
1889	5,370,369	154,584,222
1890	5,246,102	145,761,086
1891	4,563,472	116,269,343
1892	4,281,995	167,596,948

Equalized value of real and personal property in this State subject to taxation for the year 1892:

Albany	$90,208,444
Allegany	14,237,777
Broome	27,578,906
Cattaraugus	15,653,574
Cayuga	30,200,987
Chautauqua	27,413,290
Chemung	21,122,565
Chenango	16,375,104
Clinton	7,811,896
Columbia	27,580,459
Cortland	10,045,704
Deleware	13,187,736
Dutchess	44,205,512
Erie	204,301,607
Essex	13,590,467
Franklin	8,090,675
Fulton	10,975,865
Genessee	20,999,562
Greene	12,843,564
Hamilton	1,305,860
Herkimer	20,533,388
Jefferson	26,148,197
Kings	462,144,813
Lewis	7,950,426
Livingston	26,355,244
Madison	19,406,259
Monroe	121,055,932
Montgomery	24,748,082
New York	1,788,866,718
Niagara	28,884,383
Oneida	52,618,933
Onondaga	72,915,365
Ontario	29,090,255
Orange	43,874,597
Orleans	14,833,154
Oswego	23,721,665
Otsego	20,906,182
Putnam	6,975,262
Queens	61,383,525

Equalized value of real and personal property — (Concluded).

Rensselaer	$63,220,705
Richmond	13,779,112
Rockland	13,300,795
Saratoga	23,526,586
Schenectady	13,512,099
Scoharie	10,375,860
Schuyler	6,658,572
Seneca	14,929,284
St. Lawrence	27,157,205
Steuben	26,385,960
Suffolk	19,712,054
Sullivan	5,252,010
Tioga	11,907,679
Tompkins	12,725,422
Ulster	25,549,626
Warren	7,544,104
Washington	18,655,389
Wayne	24,221,624
Westchester	95,861,454
Wyoming	15,720,608
Yates	11,603,417
	$3,931,741,499

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